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ABSTRACT
                Extended Campus is a partnership between education
and the private sector that allows high school students an
opportunity to acquire core employment skills applicable to a cluster
of occupations. The program is also intended to stimulate and sustain
a symbiotic partnership between education and the private sector.
During their participation in Extended Campus, students master a
blend of academic and employment-related skills by rotating through
multiple learning stations within a private sector facility. Students
are not paid, nor do they produce within the company. This
implementation guide describes a variety of processes that occur in
the development and implementation of an Extended Campus program. It
is organized in five sections. The introductory section describes
Extended Campus; outlines the benefits of the program for students,
schools, and the private sector; and provides examples of Extended
Campus courses. In Section II, the participants in Extended Campus
are described. They include the teacher, the planning team, and the
implementing team. Developing a partnership is the topic of Section
III. Worksheets for all participants are included in this section.
The process of implementation of Extended Campus is outlined in
Section IV. This section contains information on selecting the career
cluster which is the focus of the program, the three phases of
Extended Campus, student recruitment, course outline, staff
development, field testing, and student evaluation. In the final
section, methods for evaluating the Extended Campus program are
discussed. Appendixes contain numerous sample forms, a sample course
syllabus, and a sample learning packet for use in the Extended Campus
program. (KC)
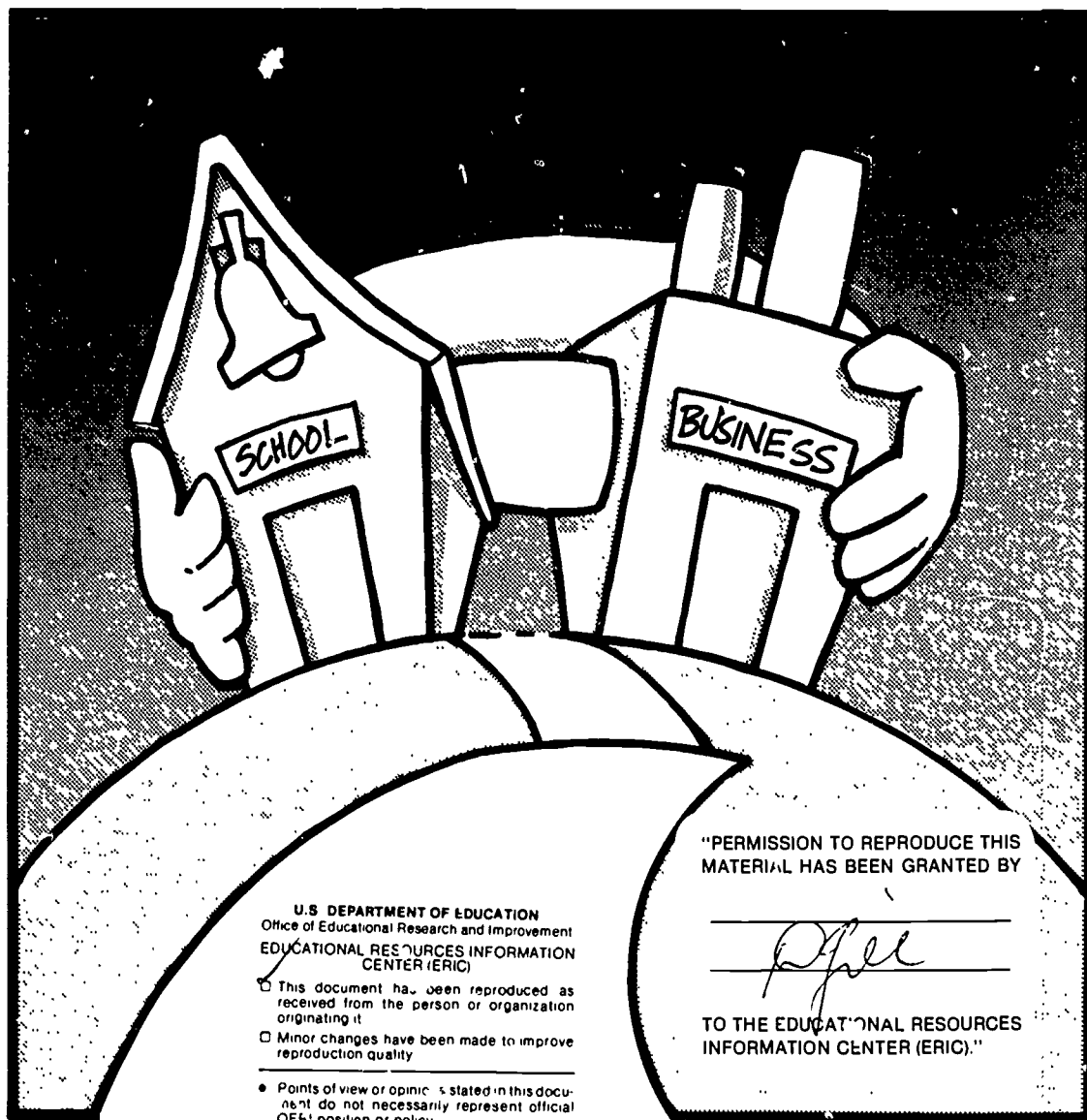
EXTENDED CAMPUS

Illinois State Board of Education

Adult, Vocational and Technical Education

EXTENDED CAMPUS

SCHOOL

BUSINESS

A Partnership that Works

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DEPARTMENT OF ADULT, VOCATIONAL AND TECHNICAL EDUCATION

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PREFACE

Extended Campus is a partnership between education and the private sector. The major purpose of the partnership is to provide high school students an opportunity to acquire core employment skills applicable to a cluster of occupations. Another purpose is to stimulate and sustain a symbiotic partnership between education and the private sector.

Students master a blend of academic and employment-related skills by rotating through multiple learning stations within the private sector facility. Students are not paid, nor do they produce work within the company. Extended Campus is for all students: the college-bound, slow learner, and special population student .

Expertise and resources are shared for the mutual benefit of all Extended Campus partners. Members of the partnership are involved in planning, developing, implementing, and evaluating Extended Campus.

There is no clear linear process to follow when establishing an Extended Campus model. This implementation guide describes a variety of processes, some of which happen simultaneously. It is meant to be a reference resource. Many parts of this guide can be modified or adapted for the user's own situation. The pages have been designed for easy duplication.

This guide will be helpful to school administrators, faculty and private sector personnel who are thinking about instituting Extended Campus, who are searchg for more information about Extended Campus, who are deciding about Extended Campus, or who want to implement Extended Campus.

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ACKNOWLEDGEMENTS

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Dr. Terry Whealon from Northern Illinois University has been a major contributor to this guide. His expertise and dedication to work far beyond traditional closing hours has been a great asset. He also preformed many roles as a consultant, curriculum specialist, researcher, and critical reviewer during the development of this guide and with sites as they implemented Extended Campus.

Two other people have been instumental in not only the development of this guide, but the success of Extended Campus. Lisa Simotes and Katherine Downing have not only been superior typists, but they also were editors, writers, receptionists, hostesses at meetings and conferences, graphic artists, and a list of other roles. Their support and input have been invaluable.

Thanks to all who have contributed to Extended Campus.

<div align="right">

Tom Boldrey, Ed.D.
Project Director

</div>

SECTION I

INTRODUCTION

This section addresses the following questions about Extended Campus:

* What Is Extended Campus?
* What are the basic features of Extended Campus?
* Why Is Extended Campus needed?
* What are some examples of Extended Campus?

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WHAT IS EXTENDED CAMPUS?

Extended Campus is a business and education partnership that provides high school students an opportunity to acquire core employment skills applicable to a cluster of occupations. Students master a blend of academic and employment-related skills by rotating through multiple learning stations within a private sector facility. Students are not paid, nor do they do productive work.

Extended Campus is:

* a partnership that works

* a partnership between education and the private sector

* a tailor-made class environment within private sector facilities

* a learning situation for students that blends academic and employment-related competencies

* a curriculum developed by representatives from both the private sector and education

* a curriculum based upon the knowledge, skills and dispositions employers require of employees

* a shared teaching responsibility between private sector employees and certified teachers

* an opportunity for students to experience multiple occupations rather than training for a single skill

* an opportunity for students to interact with contemporary experts in the field

* an alternative for students to have access to state-of-the-art technology

* a way in which students can learn the concepts and inherent values of the free-enterprise system

* a way in which students can master core skills needed in a cluster of occupations

* a valuable learning experience in which students may earn academic credit

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COMPARISON OF PROGRAM CHARACTERISTICS*

	EXTENDED CAMPUS	COOPRERATIVE EDUCATION
1. Paid work experience	no	yes
2. In-school instruction	optional	yes
3. Identified student educational goals	yes	yes
4. School supervision of students	yes	optional
5. Credits granted toward graduation	yes	yes
6. Single skill training	no	yes
7. Students mastering skills for a cluster of occupations	yes	no
8. Job-shadowing	yes	no
9. Vocational students only	no	yes

*Extended Campus should not be confused with cooperative vocational education. Cooperative vocational education is intended to train students in specific job entry skills. Students are employees, perform work, and are paid in cooperative vocational education.

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The Extended Campus partnership is designed to fit the needs of both education and the private sector*. The following are basic features of Extended Campus:

* The curriculum is tailor-made by education and the private sector. It meets the needs of both partners.

* Extended Campus integrates academics with employment-related competencies. It is multiple skill training, not single skill training.

* Extended Campus is usually taught throughout the school year, rather than in a one-semester or a three-week course.

* Extended Campus offers the most benefit to sophomores and juniors, who can change career goals and/or alter high school course plans.

* The majority of time is spent within the private sector facilities, rather than in the classroom.

* Teaching is done by private sector employees and certified teachers.

* Students follow both private sector and school codes of conduct.

* Extended Campus is not a paid work experience. Students have access to human and technological resources for learning.

* Students receive high school credits.

* A certified teacher coordinates the activities and performs multiple roles, i.e., curriculum developer, teacher, instructional manager and learning coordinator.

* The Teacher/Coordinator is provided continuous staff development opportunities for improving and upgrading personal skills.

* The structure of Extended Campus is based upon three phases. They are ORIENTATION, CORE SKILLS, AND SPECIALIZATION/APPLICATION.

* Private sector is a generic term used to represent commerce, labor, industry, and government.

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Extended Campus can be categorized into three phases: orientation, core skills, and specialization/application. A description of each phase follows:

ORIENTATION...series of planned and structured learning experiences enabling students to understand: 1) purpose and format of Extended Campus activities; 2) purpose and operational functions of the private sector; and 3) prerequisite knowledge and skills necessary in the core skills phase (six to twelve weeks in length)

CORE SKILLS...series of planned and structured learning activities enabling students to master needed competencies for success in a cluster of occupations. All students participate in all core skills (ten to twelve weeks in length)

SPECIALIZATION/APPLICATION...planned and structured learning activities specifically designed to enable students to pursue an area of personal interest in greater depth and apply core skills learned (six to ten weeks in length)

The three phases of Extended Campus are taught in a sequential order. However, the core skills phase must be developed first. The core skills phase dictates the content of the orientation and specialization/application phase. Also, students spend the majority of their time in the core skills phase.

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WHY IS EXTENDED CAMPUS NEEDED?

Extended Campus can address these problems:

Education

* school districts are often unable to finance state-of-the-art technology needed to prepare students for tomorrow's careers

* some teachers have not had the opportunity to gain up-to-date competencies necessary to adequately prepare students for tomorrow's challenges

* students lack information and experience needed to make informed decisions about careers and future education

* students do not have adequate opportunities to apply academic skills in a work setting

* many students are not motivated and complain about the lack of meaningful experiences in secondary education

* students have few opportunities to explore multiple jobs and work settings of interest to them

Private Sector

* private sector has difficulty identifying a pool of potential employees who are ready and willing to work

* private sector is not conveying to the community a positive image about its purpose and its role

* some of the best qualified and experienced employees leave the local community for what they perceive as better employment opportunities

* private sector training and retraining costs are high and continue to increase

* private sector has difficulty in determining and establishing an appropriate role with local schools that will enhance the employability of students

* many high school students and teachers lack a sufficient understanding of the free-enterprise system

EXAMPLES OF WAYS EXTENDED CAMPUS CAN ADDRESS PROBLEMS

EXAMPLE A

A high school vocational instructor was interested in improving the school's metal and machine classes. He wanted students to have exposure to skills needed for industrial jobs. The school did not have the necessary equipment for this learning to take place.

When a company within the community realized that qualified and competent people were leaving the communtiy, the company voiced a concern about the available pool of qualified people in their local community. This company was already actively involved with the education community, but had a desire to become more involved.

The school and the company formed an Extended Campus partnership to address their mutual concerns.

EXAMPLE B

A newly established industry was concerned about the knowledge, skills, and dispositions of graduating students. Specifically, the industry was concerned about the quality of the electronic skills students acquired in the local high school. The industry also had a desire to improve the quality of education and make a contribution to the community.

A local high school became concerned about the quality of the electronics education it could provide with its antiquated equipment. Many of its teachers did not possess the up-to-date competencies needed to teach this state-of-the-art technology to students.

The school and the industry discussed their mutual concerns and developed an Extended Campus course.

EXAMPLE C

A locally owned and operated company was not only growing, but also finding itself in a fluctuating competitive market. Its work force was in a constant state of flux. The company was forced to go outside the local community fo find qualified employees.

The local school district was seeking ways to improve its vocational programs, but did not have the financial resources.

Since the modern technology and human expertise already existed in the industry and the advantages of better prepared graduates would benefit both students and industry, an Extended Campus course was established.

Students benefit by:

* having access to state-of-the-art technology and contemporary experts in the field

* gaining experience and knowledge that will assist them in determining additional education and/or employment training needs

* developing competence in problem-solving, questioning, listening, and verbal and written communication skills

* learning skills of the work place not easily taught from a textbook

* having an opportunity to apply "theory" learned in the contcxt of the work environment

* gaining firsthand experiences on-site that cannot be replicated in a classroom

* understanding the free-enterprise system

* forming realistic perceptions of the work place

* acquiring knowledge and skills that facilitate the transition from school to work

* making contact with a potential employer

* earning high school credits

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Schools benefit by:

* providing curriculum and instruction that are relevant to current and anticipated employment opportunities

* offering cost effective career and vocational education programs

* giving teachers an opportunity to learn from experts in their respective fields

* interacting with community personnel and resources

* providing curriculum that changes simultaneously as businesses change

* developing equal partnerships with private sector personnel in planning, delivering, and evaluating competency-based learning for youth

* stimulating increased interest and use of existing school programs and services by students (i.e., counseling and career education resources)

* creating positive public relations: employees in ine private sector beome advocates of the school system (s) in their community

* increasing private sector commitment to education

* increasing motivation of students

* reducing truancy and dropout rates

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HOW DOES THE PRIVATE SECTOR BENEFIT FROM EXTENDED CAMPUS ?

The private sector benefits by:

* enhancing its community image

* creating awareness of the business as a desirable place to work

* gaining students and educators as advocates of the business

* reducing training and retraining costs

* increasing the pool of potential employees who possess:

    1. realistic work expectations
    2. skills and attitudes needed by the business
    3. working knowledge of the business
    4. the ability to grow and change as the business changes

* providing youth in the community with a positive understanding of the free-enterprise system and the economic health of the community

* creating awareness among youth of employment opportunities in their community

* increasing job satisfaction in its employees

* renewing business commitment to education

* providing direct input into effectiveness and efficiency of educational programs

* increasing employee productivity

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EXAMPLES OF EXTENDED CAMPUS COURSES

EXAMPLE I :   A COMPUTER INDUSTRY TECHNOLOGY (CIT) COURSE:

* vocational teacher designated as Teacher/Coordinator

* twenty to twenty-five students; primarily juniors

* students selected by application and/or interview, teachers, counselors, and Teacher/Coordinator

* course taught two hours per day, five days a week at private sector facility

* three phases;   ORIENTATION...six to ten weeks

   CORE SKILLS...sixteen to eighteen weeks, with each student spending six to eight days in each skill area

   SPECIALIZATION/APPLICATION...individual and group learning activities during the remaining weeks of the semester

* students earning two credits for the CIT course

* a two-semester course

* nine core skills areas

* three school districts and four high schools involved

* teaching done by vocational instructor and private sector employees

In summary, four high schools are involved in the Computer Industry Technology course. Several methods are used to select twenty to twenty-five students. Students are selected by application, interview, and input of counselors and vocational coordinator. Most of the students are juniors.

All students participate in all three phases of CIT. Students can pursue their own interest in the specialization/application phase. Students travel to the private sector facility daily and spend two hours per day, five days a week, at the facility. The CIT course is conducted throughout the school year. Students earn two credit hours for their participation in the Computer Industry Technology course.

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EXAMPLE II: MANUFACTURING TECHNOLOGY COURSE :

* vocational teacher serves as Teacher/Coordinator

* Teacher/Coordinator and personnel manager of private sector facility select students

* ten juniors and seniors participate

* teaching done by vocational instructor and private sector employees

* three phases :   ORIENTATION . . . twelve weeks

    CORE SKILLS . . . eleven weeks with students spending two to four days per skill area

    SPECIALIZATION / APPLICATION . . . students spend time in the core skill areas that interest them

* four days a week, two hours per day at business

* a two-hour session conducted at the high school, one day per week

* students submit a daily log of experiences and a final paper relating their experiences and the effect these experiences had on their goals

* fourteen core skill areas

In summary, one high school is involved in the Manufacturing Technology course. The agreement between the school and private sector states a maximum of ten students may participate. The majority of the students are juniors, selected by application and interview with the coordinator and personnel manager of the private sector facility.

Students rotate through fourteen core skill areas and spend about a week in each area. Students receive information on resumes, job applications, interviews and other job-seeking skills.

Students earn two credit hours. Their daily log and final paper act as an evaluation of their experience as well as evaluation tools for improving the course.

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EXAMPLE III: HEALTH OCCUPATIONS COURSE:

* certified health occupations teacher coordinates activities

* twenty to twenty-five students; primarily juniors

* students participate by enrolling in the health occupations skill development courses

* course taught two or three days a week at health care facility

* three phases: ORIENTATION....nine weeks

   CORE SKILLS...eighteen weeks, with each student rotating through departments at the health care facility

   SPECIALIZATION/APPLICATION....individual and group learning activities in areas of special interest to the students

* students receive two credits per year for the course

* generally a two-semester course, though some courses are two-year courses

* number of skill areas varies with the health care facility utilized

* teaching done by voactional instructor and employees of the health care facility

In summary, the health occupations course is a one or two-year course offered at many area vocational centers and a few comprehensive high schools. This Extended Campus course is an integral part of the skill development course curriculum and students partivipate by enrolling in the capstone course. Most of the students are juniors, but seniors may participate in the course.

All students participate in all three phases of the course. The specialization/application phase allows students to pursue their interests. Students spend two hours per day two or three days a week throughout the school year at the health care facility. Depending on the resources of the community, one ore more health care facility may be involved. Students earn two credit hours for their participation in the course per year.

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PHILOSOPHY

1. Q: How did Extended Campus first begin?

A: Extended Campus developed in response to three overlapping and interdependent issues facing providers of education and training : 1) an increasing shortage of public school teacher/instructors knowledgeable and competent in high technology; 2) an increased demand for employees who were knowledgeable and functional in high technology fields; and 3) the high cost of equipment, machinery, and tools.

Extended Campus was also influenced by youth who were having difficulty preparing for a career that not only matched their goals, interests, and abilities, but also coincided with the knowledge and skills required in the work force.

2. Q: What is the expectation of Extended Campus ?

A: Upon completion of the course, students will have experience and knowledge that enables them to determine their future education and/or employment training needs.

Extened Campus synchronizes education with the individual's desire for satisfying work and society's need for a productive work force.

3. Q: Is Extended Campus limited to high-tech industries?

A: No, Extended Campus can be modified to match the local situation. Extended Campus could exist in a manufacturing facility, a university research department, a hospital, or an auto dealership.

4. Q: How does Extended Campus fit into the regional delivery system for education for employment?

A: Very well. It provides the opportunity for several school districts to work together. Extended Campus sites could be satellite centers for the delivery of cost effective up-to-date curriculum using existing state-of- the-art technology and contemporary experts.

FINANCES

5. Q: What is the cost of Extended Campus to the school?

A: Employee's time is the major expense. People are involved in planning and implementing Extended Campus. A Teacher/Coordinator will be involved in identifying core skills and competencies, developing curriculum, conducting staff development, etc. When an Extended Campus course begins, the Teacher/Coordinator will be involved daily. These time expenses may need to be reimbursed.

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6.   Q: What is the cost to the private sector?

       A: Employee's time. Employees' time the first year will be extensive in comparison to following years. The employees will be involved in curriculum and staff development and in teaching the students.

7.   Q: What is the cost of maintaining Extended Campus?

       A: It should be self-supporting. The major cost would be the salary of the Teacher/Coordinator, who is usually already employed by the school.

8.   Q: How can the school save money through Extended Campus Course?

       A: Schools do not need to replicate expensive equipment they would normally need to purchase to offer state-of-the-art programs.

STAFFING

9.   Q: Does Extended Campus create a need to hire extra school personnel?

       A: Teachers usually teach Extended Campus as one of their assignments and also teach other classes in their school district.

10.   Q: How is Extended Campus staffed?

       A: A certified teacher functions as a Teacher/Coordinator for Extended Campus. This person accompanies students to the private sector facility and remains on site. Private sector employees are also involved in teaching the students.

11.   Q: When should the Teacher/Coordinator be identified?

       A: The Teacher/Coordinator should be selected immediately after the commitment for Extended Campus is obtained from the school and the business. This person provides the leadership for Extended Campus and serves as the link between the partners.

12.   Q: What are the responsibilities of the Teacher/Coordinator?

       A: The Teacher/Coordinator provides the leadership to the Extended Campus partnership, serves as the link between the partners, and is the key to the success of the course. Roles include: teacher, counselor, evaluator, coordinator, curriculum developer, and liaison. Specific duties of the Teacher/Coordinator are listed on page II-4 of the Extended Campus Implementation Guide.

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ORGANIZATION

13. Q: What steps are necessary to develop an Extended Campus Course?

A: The diagram, 'A DECISION/IMPLEMENTATION MODEL' on page II-2a of the Extended Campus Implementation Guide outlines the process. An "EXTENDED CAMPUS SEQUENCE OF EVENTS" on page II-9 of the Implementation Guide describes tasks to be completed.

14. Q: How much time is required to plan and develop an Exte ed Campus course?

A: Significant planning is needed prior to the Implementation of Extended Campus. The hours required for planning are difficult to predict. Some schools and businesses have implemented the course within six weeks; others have taken from twelve to fifteen months. How the team players work together is the key factor.

15. Q: Are there any regulations that apply to students during their non-paid learning experiences within the private sector facilities?

A: Students must be in compliance with the Fair Labor Act. The Teacher/Coordinator must monitor the learning stations regularly to assure that students are always learners. Students shall not produce work within the company. The Fair Labor Standards Act is printed in the Appendix of the Extended Campus Implementation Guide.

16. Q: Who is responsible for transportation of students to and from the learning site?

A: Some schools provide transportation to and from the learning site, while others require students to be responsible for their own transportation.

17. Q: Is there a minimum and/or maximum number of students required for an Extended Campus course?

A: A minimum number is determined by what is cost effective. Many school districts have established a minimum number of students necessary to offer a class.

However, the number of students cannot be so high that they disrupt the operations of the business.

The number of students has ranged from twelve to twenty-seven.

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18. Q: Can Extended Campus course receive vocational education reimbursement?

A: Reimbursement is based on whether a c_ırse is an approved program in the vocational plan. If the description and objectives show that the course is providing exploratory or skill development experiences in one of five occupational areas, it is eligible for approval and reimbursement.

19. Q: How is insurance handled for Extended Campus?

A: The local school district needs to address this question with its insurance carrier and/or legal counsel. Most school districts have found their existing liability coverage to be adequate. Some districts have required students to purchase health insurance. Some sites have the private sector and school district partners develop hold harmless agreements. Since students are not employees, there is no need for worker compensation insurance.

Checking on the coverage of insurance before the Extended Campus begins is a must.

CREDITS

20. Q: Do students receive credit for Extended Campus?

A: Yes. The curriculum content of the course determines the subject in which the credit hours are earned. Most Extended Campus courses award two credit hours for a two-semester course that meets two hours per day. Local school boards determine the credit.

21. Q: Can credit earned from participation in an Extended Campus course count towards meeting State high school graduation requirements?

A: Illinois high school requirements include optional credits for vocational education and career development. Extended Campus can provide credit in these two areas.

Extended Campus can also meet math and science requiremer's. If the majority (over 50%) of the course content teaches recognized math or science concepts, the Extended Campus course can meet the requirements. This is dependent upon approval by the local school board.

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LABOR - RELATIONS

22. Q: How does Extended Campus affect the production time and level of the private sector?

    A: The time employees spend teaching students can be scheduled around peak production times. Some private sector facilities have documented that employees have reported increased levels of job satisfaction.

23. Q: How do unions react to Extended Campus?

    A: There is no inherent conflict. Unions have supported it. Extended Campus exists in both union and non-union facilities.

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SECTION II

WHO SHOULD BE INVOLVED IN EXTENDED CAMPUS

Partnerships like Extended Campus can begin with the identification of the people to be involved before the partners are confirmed. On the other hand, the partnership is often established before all the people are convened. For example, a hospital executive administrator and a school district superintendent, who serve on the same United Way committee, discuss their over-lapping needs and then convene a representative group from their respective institutions to delineate the details of an Extended Campus course.

There is no right way to begin. There are advantages to both strategies. Whether the team of people are identified first or second is immaterial. What is important is that the appropriate people have input in order to reduce their resistance to new experiences that will involve them.

Both private sector* employees and educators are involved in planning, developing, implementing, and evaluating an Extended Campus course. Everyone must work as a team to succeed.

This section defines the people who are involved in Extended Campus, their roles and their responsibilities. The people include: the planning team; the Teacher/Coordinator; and the implementing team.
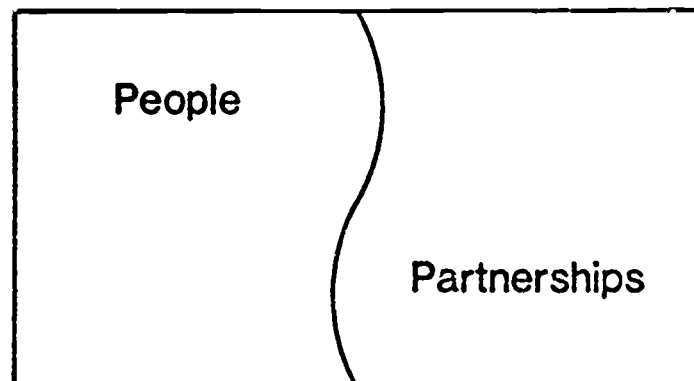
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*Private sector is a term used to represent commerce, labor, industry, and government.

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THE EXTENDED CAMPUS TEAMS

To establish Extended Campus, participants must understand its concept, decide to develop or not to develop Extended Campus, and implement the Extended Campus course.

Coordination, collaboration, and cooperation among all involved is essential. All must work as a team toward the success of the course. Team members must be aware of their roles, and assume and complete their responsibilities. The key roles are to investigate, initiate, and implement. See diagram on page II-2a of the Extended Campus Implementation Guide.

There are two teams:

> PLANNING TEAM . . . . leaders and decision-makers who investigate the application of Extended Campus in their community and who initiate the commitment of establishing and Extended Campus course. This team is usually a formal committee whose membership is constant. See page II-3 of the Extended Campus Implementation Guide for additional information.

> IMPLEMENTING TEAM . . . decision-makers and practitioners who identify the career cluster and score skills; develop the curriculum; and provide for staff development and evaluation. This team may be a formal committee or its membership may fluctuate with the task to be completed. See pages II-5 and 6 of the Extended Campus Implementation Guide for additional information.

Both teams have a vital role in the development and delivery of Extended Campus. It is imperative that all individuals, regardless of their involvement, understand: 1) the concept of Extended Campus; 2) the benefits to the private sector, education, and the participants; and 3) the basic features of Extended Campus. All individuals must be willing to give their time to help make Extended Campus succeed.

Some individuals may continue from the planning team to the implementing team, while others may only be involved on one team.

An individual who plays a key role in the development, implementation, and evaluation of Extened Campus is the Teacher/Coordinator. This individual provides the leadership to Extended Campus and serves as the link between the private sector and school. The Teacher/Coordinator should be named immediately after tne commitment for Extended Campus is obtained from the private sector and the school. Page II-4 of the Extended Campus Implementation Guide lists specific responsibilities of the Teacher/Coordinator.

A DECISION/IMPLEMENTATION MODEL

Awareness	Understanding	Decision Making	Implementation

planning team

implementing team

teacher coordinator
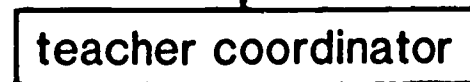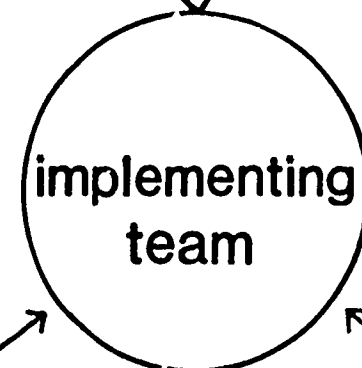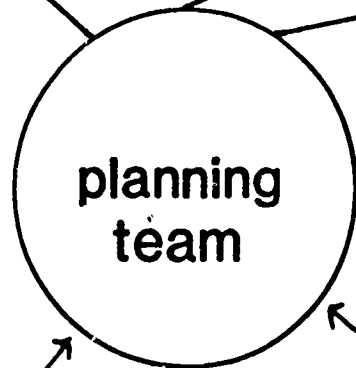
INVESTIGATE

education and private sector needs

education and private sector resources

education and private sector partnerships

INITIATE

plans for Extended Campus

identification and recruitment of people and resources

time line for implementation

IMPLEMENT

select career cluster

determine core skills

develop curriculum

prepare experts for teaching roles

conduct evaluation

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The planning team makes the initial decision regarding Extended Campus. They review the problems faced by education and the private sector. The planning team determines if a need exists for Extended Campus, reviews the community's resources, and finally decides if Extended Campus should or should not exist in the community.

The planning team generates the initial Extended Campus action plan. They determine the scope, depth and parameters of Extended Campus. The planning team projects what has to be done in order to implement Extended Campus, how it will be done, when it will be done, and who will do it. This team decides the time and sequence of events in establishing Extended Campus and identifies non-human resources needed to implement Extended Campus.

The planning team presents the Extended Campus concept to potential partners. Then, they secure a written commitment for Extended Campus from the top level management o both the private sector and education.

Who is the planning team? Key people who could be involved include:

EDUCATORS	PRIVATE SECTOR
Superintendent	Chief executive officers
Administrators	Presidents, vice presidents
Curriculum specialists	Personnel officers
Vocational Ed. administrators	Training directors
Teachers/counselors	Department heads

The Planning team should continue as part of the Extended Campus team after their initial investigation and planning are completed. They should be involved in making presentations about Extended Campus, in initiating Extended Campus in nearby communities, and in evaluating Extended Campus.

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Extended Campus Action Plan

What is to be done	How it will be done	When it will be done	Who will do it	Resources needed

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THE EXTENDED CAMPUS TEACHER/COORDINATOR

A key individual in the success of Extended Campus is a Teacher/Coordinator. This person provides leadership in the development of Extended Campus course and serves as the link between the private sector and the school. The Teacher/Coordinator should be selected immediately after the commitment for Extended Campus has been obtained from education and the private sector.

The Teacher/Coordinator has an integral part in implementing and evaluating and Extended Campus course. This individual will assume multiple roles throughout the implementation and evaluation of Extended Campus. These roles include:

TEACHER:	facilitating learning for students· providing in-service for private sector employees and co-workers
CURRICULUM DEVELOPER:	developing overall scope and sequence of the curriculum and specific units of instruction
LIAISON:	maintaining rapport with private sector personnel; interfacing regularly with employee instructors; meeting the needs of these employees; keeping school personnel informed of Extended Campus activities
COORDINATOR:	directing and monitoring the daily operations of Extended Campus
COUNSELOR:	assisting students with educational, social, and work attitude problems; providing support to private sector employees
EVALUATOR:	gathering qualitative and quantitative information from students, instructors, private sector and school personnel; preparing evaluation reports on the progress of students and success of Extended Campus
PUBLIC RELATIONS PERSON:	establishing and maintaining open communications among all participants; keeping various participants informed of progress, benefits, and success of Extended Campus; recognizing individuals for their contributions and accomplishments

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IMPLEMENTING TEAM

The Implementing team's responsibilities center around curriculum development and include activities such as determining core skills, selecting learning stations, developing learning activities, preparing instructors, and deciding evaluation procedures. The membership of this team is not constant. The individuals involved will depend on the task to be completed. The Teacher/Coordinator monitors the team's work and determines when the task is completed satisfactorily.

Specific tasks of the Implementing team are:

TASK	INDIVIDUALS
Select career cluster	School administrators Department managers Curriculum specialists Extended Campus Teacher/Coordinator
Determine core skills	Department managers First line employees Training director Extended Campus Teacher/Coordinator
Identify learning stations	Department managers Extended Campus Teacher/Coordinator
Develop learning activities for core skills phase	First line employee Extended Campus Teacher/Coordinator
Develop learning activities for orientation phase	Personnel Manager Training director Extended Campus Teacher/Coordinator
Develop learning activities for specialization/application phase	Department manager Extended Campus Teacher/Coordinator
Prepare employees for teaching role	Training director Department manager Extended Campus Teacher/Coordinator

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IMPLEMENTING TEAM (continued)

TASK	INDIVIDUALS
Develop overall sequence of learning activities	Department managers Extended Campus Teacher/ Coordinator
Develop specific daily schedule of learning activities	Department managers Extended Campus Teacher/ Coordinator
Inform school personnel about Extended Campus	Chief executive officer School administrators Extended Campus Teacher/ Coordinator
Recruit and select students	Personnel manager Teachers, Counselors Extended Campus Teacher/ Coordinator
Develop and conduct evaluation process	Department managers First line employees Curriculum specialists Extended Campus Teacher/ Coordinator

The Implementing team's tasks are described in detail on pages II-7 and 8 of the Extended Campus Implemenatalon Guide.

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TASKS OF THE IMPLEMENTING TEAM

The paragraphs that follow explain the specific tasks of the implementing team.

SELECT CAREER CLUSTER:
A specific group of occupations or career cluster is the focus of the Extended Campus course. The cluster of occupations which require similar education and training gives direction to the identification of learning stations and content of the course. This group of occupations is closely related to the core skills of the course. The steps necessary to identify the career cluster are outlined on pages IV-2 and 3 of the Extended Campus Implementation Guide.

DETERMINE CORE SKILLS:
Core skills are the foundation of the Extended Campus course. They give direction to selecting the learning stations and the content of the course. The core skills are the tasks students must master to be successful in the cluster of occupations. A worksheet for determining core skills can be found on pages IV-6, 7, 8, and 9 of the Extended Campus Implementation Guide.

IDENTIFY LEARNING STATIONS:
Learning stations are the specific departmentrs or locations within the private sector where the students will learn the core skills. Determining which personnel can best teach the core skills and where is the best location for this teaching will help to identify the learning stations.

DEVELOP LEARNING ACTIVITIES:
The teaching/learning method must be congruent with that which is being taught. The method used may also be influenced by the constraints of the facility (demonstration vs. hands-on experience). Methods used should also assure optimum learning by the student.

PREPARE EMPLOYEES FOR TEACHING ROLE:
Employee instrucors must feel confident in their new "teaching role." They must also understand Extended Campus and their responsibilities. Ways to prepare employee instructors for teaching are discussed on pages IV-21, 22, and 23 of the Extended Campus Implementation Guide.

SEQUENCE LEARNING ACTIVITIES:
The learning activities within the Extended Campus course should be sequential and build upon each other. The core skills phase is the foundation for the course, but is preceded by orientation and followed by specialization/application. A pre-determined sequence of learning activities assures continuity of the course.

DEVELOP DAILY SCHEDULEE LEARNING ACTIVITIES:
Everyone involved in teaching and coordinating the course should know what is being taught, by whom, and where. Alternate plans for the unexpected should be part of the daily schedule. This provides for the continuation of the learning activities in case of emergency, absenteeism, or sickness.

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INFORM SCHOOL PERSONNEL ABOUT EXTENDED CAMPUS:

Administrators, counselors, and other faculty members should understand the purpose, scope, and depth of Extended Campus. They should also be familiar with the activities within an Extended Campus course and its effectiveness in delivering vocational education. The more that is understood by everyone, the more successful the course will be.

RECRUIT AND SELECT STUDENTS:

The students and their parents must be well informed about the similarities and differences of Extended Campus to other high school courses. How the students are recruited and selected is the key to the success of the course. Extended Campus students are the best advocates of the course to their peers. Pages IV-25 of the Extended Campus Implementation Guide cites several methods of student recruitment and selection.

EVALUATE EXTENDED CAMPUS:

Evaluation is a continuous process. It must be provided for in the development of any program. Page IV-27 of the Extended Campus Implementation Guide describes items to consider the first year the course is offered. Section V of the Guide describes methods of conducting a summative evaluation of the course.

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EXTENDED CAMPUS SEQUENCE OF EVENT

PLANNING TIME BEFORE STARTING DATE	EVENTS
11 months	Review needs of education and private sector Identify potential partnerships Make decisions to establish Extended Campus
9 to 10 months	Develop initial plan for Extended Campus Secure commitment from school(s) and private sector domains Prepare formal memorandum of under-standing between partners Identify an Extended Campus Teacher/Coordinator
7 to 8 months	Teacher/Coordinator begins to inter-face with private sector employees Select career cluster
4 to 6 months	Identify core skills and competencies to be learned Determine learning activities for orientation and specialization phases Determine who will teach activities and where they will be taught Determine monthly and daily schedule for Extended Campus course Select students
1 to 3 months	Prepare experts for their teaching roles Prepare support materials needed Reaffirm schedule commitments Prepare evaluation tools

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SECTION II CHECKLIST

Check the following tasks that have been completed.

	Completed	Not Completed

Planning team members identified
    a. decision-makers represented
    b. concept of Extended Campus
       understood
	_____	_____

Planning team functioning
    a. regular meetings conducted
    b. minutes of meetings filed
    c. Extended Campus opportunities
      reviewed
	_____	_____

Letters of commitment for Extended Campus secured from chief executives of the private sector and education.	_____	_____
Action plan delineated for implementing Extended Campus.	_____	_____
Implementing team members identified and appropriate practitioners included	_____	_____
Extended Campus Teacher/Coordinator identified	_____	_____

If you have completed the above tasks, you are ready to identify and finalize your Extended Campus partnership. Section III of the Implementation Guide will help you with this task.

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SECTION III

DEVELOPING A PARTNERSHIP

Historically, partnerships have been an integral part of American education. Partnerships between education and the private sector* can coordinate expertise, facilities, materials, and/or equipmemt for the benefit of all involved. Partnerships between education and the private sector serve interests of students, schools, the private sector, as well as the community.

This section discusses processes for developing an Extended Campus partnership. The processes include reviewing existing partnerships, as well as examining potential partnerships, and developing an action plan for recruiting partners.

* Private sector is a term used to represent commerce, industry, labor, and government.

THE EXTENDED CAMPUS PARTNERSHIP

Extended Campus is a partnership that works. It is a partnership between education and the private sector that provides high school students an opportunity to aquire skills and knowledge in a cluster of occupations. It integrates conventional school subjects with occupational skills needed by today's work force. Members of the partnership are involved in planning, developing, implementing, and evaluating Extended Campus.

Historically, partnerships have combined the energies and resources of each partner for their mutual benefit. Different kinds of partnerships exist in most communities. Some include:

* students tours of private sector facilities

* seminars and workshops taught by private sector personnel for students and/or teachers

* donation and/or sharing of equipment, displays, films, etc.

* job-shadowing programs for students

* school staff internships at a business

* classes for students at a business

* private sector personnel as resource teachers

* private sector personnel as tutors of students

* summer jobs for students

* advisory councils for vocational education programs

Many of the partnerships listed above can be found within Extended Campus. Not only does Extended Campus foster new partnerships, but frequently expands existing ones. Extended Campus also acts as a stepping stone for the formation of new or addditional partnerships.

What makes Extended Campus successful? Commitment! Other factors needed for its success are enthusiasm, trust, and respect.

Page I-6 of the Extend Campus Implementation Guide lists common concerns addressed by Extended Campus. The key factor in identifying Extended Campus partners is the common concern for the learner. Other factors include the availability of expertise, facilities, materials, and equipment.

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EDUCATORS who are investigating potential partners or examining existing partnerships should answer the following questions:

* What partnerships between your school and the private sector currently exist ? What do the partnerships provide?

* What programs and/or courses of the school curriculum could benefit from an Extended Campus partnership?

* What private sector facilities could offer unique state-of-the-art technology not provided at your school?

* What existing partnerships have the potential for expansion or modification into Extended Campus?

* What private sector facilities would be most likely to support an Extended Campus partnership?

PRIVATE SECTOR PERSONNEL who are considering an Extended Campus should answer the following questions:

* is your business currently involved in partnerships? If yes, with whom?

* How does your business benefit from these partnerships?

* What unique state-of-the-art technology can your business offer high school students?

* What problems or concerns might Extended Campus address, if implemented at your business?

* How could Extended Campus address these problems or concerns?

* What schools would most likely support an Extended Campus partnership?

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EDUCATOR'S WORKSHEET

This worksheet will help educators identify potential Extended Campus partners.

1. List existing business/education partnerships and their purpose. _____

   _____

2. A. List the programs and /or courses of your school's curriculum that could benefit from an Extended Campus partnership. _____

   _____

   B. Why would these programs and/or courses benefit from Extended Campus ?

   _____

   _____

3. List any existing partnerships that could be expanded or modified into Extended Campus. _____

   _____

4. List businesses that might support an Extended Campus partnership. _____

   _____

5. List, as specifically as possible, your reasons for implementing an Extended Campus course. Refer to page I-6 of the Extended Campus Implementation Guide. _____

   _____

   _____

6. How would you determine if goals were reached ? _____

   _____

   _____

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WORKSHEET FOR THE PRIVATE SECTOR

This worksheet will help businesses identify potential Extended Campus partners.

1. List existing business/education partnerships and their purpose. _____

    _____

    _____

2. How do these partnerships benefit your facility, the community, and the school ?

    _____

    _____

    _____

3. What problems or concerns exist within your business that could be addressed through a private sector partnership with schools ? _____

    _____

4. How could Extended Campus address these problems or concerns ? _____

    _____

    _____

5. What schools could be approached to initiate an Extended Campus partnership ?

    _____

    _____

6. List, as specifically as possible, your reasons for implementing an Extended Campus course. Refer to page I - 6 of the Extended Campus Implementation Guide.

    _____

    _____

7. How would you determine if goals were reached ? _____

    _____

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SECTION III CHECKLIST

Check the following tasks that have been completed.

	COMPLETED	NOT COMPLETED
Top level management personnel from the potential private sector and education are adequately informed about Extended Campus.		
Existing partnerships reviesed.		
Potential partnerships investigated.		
Potential Extended Campus partners identified.		
Existing Extended Campus site visited		
Commitment for Extended Campus from chief executives of the private sector and education secured.		

After you have completed these tasks, you are ready to begin implementing I xtened Campus. Section IV of the Extended Campus Implementation Guide outlines implementing steps.

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SECTION IV

IMPLEMENTATION

The investigation of potential Extended Campus partnerships, acquisition of commitments for the course, and selection of the people to be involved have been completed. The next step is implementing the course.

This section outlines essential implementation processes that occur as Extended Campus is developed. The processes include:

* Selecting a career cluster
* Determining and developing content of the course
* Conducting staff development
* Recruiting and selecting students
* Preparing memoranda of understanding
* Conducting a field test

SELECTING THE CAREER CLUSTER

A career cluster is a group of jobs having similar education and training requirements. Extended Campus focuses on a career cluster. It provides students experiences in several jobs within this cluster. Students also acquire generic job competencies and a foundation of experiences upon which they can make their future educational and career plans.

Identi.. ~tion of the career cluster must happen prior to the development of the curriculum. However, the career cluster must be continuously re-evaluated for its appropriateness to the overall curriculum.

In order to identify a career cluster the following questions need to be answered :

1.   What are the departments within the selected private sector facility ?

_____

_____

_____

_____

2.   What different job titles exist within the selceted private sector facility ?

_____

_____

_____

3.   Is there sufficient labor market demand for these job titles ?

Yes ___   No ___

4.   Which one of the following five broad occupational areas best matches the job titles ?

> agricultural occupations
> home economics occupations
> health occupations
> industrial occupations
> business, marketing, and management occupations

5.   What career cluster best matches the job titles ? (See page IV - 3a of Extended Campus Implementation Guide for listing of career clusters.) _____

_____

6. A. Is this career cluster already included in the school's curriculum ?
    Yes _____ No _____

    B. If yes, how might Extended Campus more effectively deliver that area of the
    curriculum?_____

    _____

    _____

    C. If no, what must be done to expand the existing curriculum ? What prerequisites
    would be necessary ? At what grade level (s) should this course be offered ?_____

    _____

    _____

NOW IS THE TIME TO TITLE THE EXTENDED COURSE !!!!

The name of the course frequently reflects the career cluster. Be creative and descriptive when naming the course. For example, if the focus of the Extended Campus course is Electronics, the name of the course might be E.T., an acronym for Electronic Technology.

List potential names for the Extended Campus course. _____

_____

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CIP CLUSTERS

The Illinois State Board of Education, Department of Adult Vocational, Technical Education uses five occupational areas and accompanying CIP codes to group occupations. This list may be helpful if the careers are within the five areas.

CIP Code No.	Vocational Program Titles

Agricultural Occupations

01.0201	Agricultural Mechanics
01.0301	Agricultural Production
01.0401	Agricultural Products and Processing
01.0501	Agricultural Services and Supplies
01.0601	Horticulture
03.0101	Renewable Natural Resources
03.0401	Forestry Production and Processing
01.9902	Agricultural Cooperative Education

Business, Marketing and Management Occupations

06.1701	Real Estate
06.1801	Small Business Management
07.0101	Accounting, Bookkeeping and Related Programs
07.0302	Business Computer and Console Operation
07.0303	Business Data Entry Equipment Operation
07.0305	Business Data Programming
07.0604	Legal Secretarial
07.0605	Medical Secretarial
07.0606	Secretarial
07.0608	Word Processing
07.0705	General Office Clerk/Information Specialist
08.0101	Apparel and Accessories Marketing
08.0201	Business and Personal Service Marketing
08.0401	Financial Services Marketing
08.0501	Floristry, Farm and Garden Supplies Marketing
08.0601	Food Marketing
08.0702	Industrial Marketing
08.0705	Retailing
08.0706	General Marketing
08.0801	Home Furnishings and Office Products Marketing
08.0806	Hardware Marketing
08.0901	Hospitality and Recreation Marketing
08.1001	Insurance Marketing
08.1101	Transportation and Travel Marketing
08.1201	Vehicles and Petroleum Marketing
09.0201	Advertising
07.9902	Business and Office Cooperative Education
08.9902	Marketing Cooperative Education

CIP
Code No.   Vocational Program Titles

Health Occupations

17.0101   Dental Assisting
17.0203   Electrocardiograph Technician
17.0204   Electroencephalograph Technician
17.0205   Emergency Medical Technician - Ambulance
17.0209   Radiologic Aide
17.0210   Respiratory Theraphy Technician
17.0211   Surgical Technician
17.0212   Diagnostic Sonography
17.0304   Medical Laboratory Aide
17.0404   Home Health Aide
17.0405   Mental Health/Human Services Assisting
17.0502   Central Supply Aide
17.0503   Medical Assisting
17.0506   Medical Records Aide
17.0507   Pharmacy Assisting
17.0511   Veterinarian Aide
17.0513   Ward Clerk
17.0523   Health Care Aide
17.0601   Geriatric Aide
17.0602   Nursing Assisting
17.0605   Practical Nursing
17.0611   Food Service Health Supervision
17.0704   Optometric Therapy Aide
17.0809   Occupational Theraphy Aide
17.0814   Physical Theraphy Aide
17.0817   Therapeutic Recreation Technician
17.0830   Rehabilitation Aide
17.9902   Health Occupations Cooperative Education

Home Economics Occupations

20.0101   Occupation of Homemaking
20.0201   Child Care and Guidance Management and Services
20.0210   Elder Care Aide
20.0211   Child Care/Elder Care Aide
20.0301   Clothing, Apparel and Textiles Management,
                    Production and Services
20.0306   Fashion/Fabric Coordination
20.0401   Food Production, Management and Services
20.0501   Home Furnishings and Equipment Management,
                    Production and Services
20.0601   Institutional, Home Management and Supporting
                    Services
20.9902   Home Economics Cooperative Education

CIP
Code No.   Vocational Program Titles

Industrial Occupations

04.0501	Interior Design
10.0104	Radio and TV Production and Broadcasting
12.0102	Drycleaning
12.0103	Laundering
12.0402	Barbering
12.0403	Cosmetology
15.0510	Environmental Control
15.0702	Quality Control
41.0303	Metallurgy
43.0203	Firefighting
43.1000	Social/Public Service Occupations
46.0102	Brick, Block and Stonemasonry
46.0201	Carpentry
46.0301	Residential/Commercial Electrician
46.0302	Electrician
46.0303	Lineworker
46.0401	Building Maintenance and Custodial Services
46.0404	Drywall Installation
46.0408	Painting and Decorating
46.0501	Plumbing, Pipefitting and Steamfitting
46.1000	Construction and Building Trades
47.0102	Business Machine Repair
47.0103	Communication Electronics
47.0104	Computer Electronics Maintenance and Repair
47.0105	Industrial Electronics
47.0106	Major Appliance Repair
47.0107	Motor Repair
47.0108	Small Appliance Repair
47.0201	Heating, Air Conditioning, and Refrigeration Mechanics
47.0302	Heavy Equipment Maintenance and Repair
47.0303	Industrial Machinery Maintenance and Repair
47.0401	Instrument Repair
47.0405	Operation, Maintenance, and Repair of Audio-Visual Equipment
47.0408	Watch Repair
47.0501	Stationary Energy Sources
47.0601	Vehicle and Mobile Equipment Mechanics and Repairers
47.0602	Aircraft Mechanics
47.0603	Automotive Body Repair
47.0604	Automotive Mechanics
47.0605	Diesel Engine Repair
47.0606	Small Engine Repair
48.0101	Drafting (General)
48.0201	Graphic and Printing Communications
48.0203	Commercial Art
48.0204	Commercial Photography
48.0206	Lithography, Photography, and Platemaking

CIP
Code No.   **Vocational Program Titles**

Industrial Occupations (con't.)

48.0208	Printing Press Operations
48.0209	Silk Screen Making and Printing
48.0303	Upholstering
48.0501	Precision Metal Work
48.0502	Foundry Work
48.0503	Machine Tool Operation/Machine Shop
48.0506	Sheet Metal
48.0507	Tool and Die Making
48.0508	Welding, Brazing, and Soldering
48.0604	Plastics
48.0703	Millwork and Cabinet Making
49.0101	Ground Support Operations (Air Transportation)
49.0102	Airplane Piloting and Navigation
49.0203	Materials Handling
49.0204	Mining Equipment Operation
49.9902	Industrial Cooperative Education

THE THREE PHASES OF EXTENDED CAMPUS

Extended Campus can be categorized into three phases: orientation, core skills, and specialization/application. A description of each phase follows:

ORIENTATION....series of planned and structured learning experiences enabling students to understand: 1) the purpose and format of Extended Campus; 2) the purpose and operational functions of the private sector; and 3) prerequisite skills and knowledge necessary in the core skills phase (six to twelve weeks in length.)

CORE SKILLS....series of planned and structured learning activities enabling students to master competencies needed to be successful in a cluster of occupations. All students participate in all core skills (ten to twelve weeks in length.)

SPECIALIZATION/APPLICATION....planned and structured learning activities specifically designed to enable students to pursue an area of personal interest in more depth and apply core skills learned (six to ten weeks in length.)

The three phases of Extended Campus are taught in a sequential order. However, the core skills phase must be developed first. The core skills phase dictates the content of the orientation and specialization/application phases. Also, students spend the majority of their time in the core skills phase.

The diagram below demonstrates the sequence of the phases and their relationship to each other.

ORIENTATION PHASE — CORE SKILLS PHASE — SPECIALIZATION APPLICATION PHASE — Sept. ... May
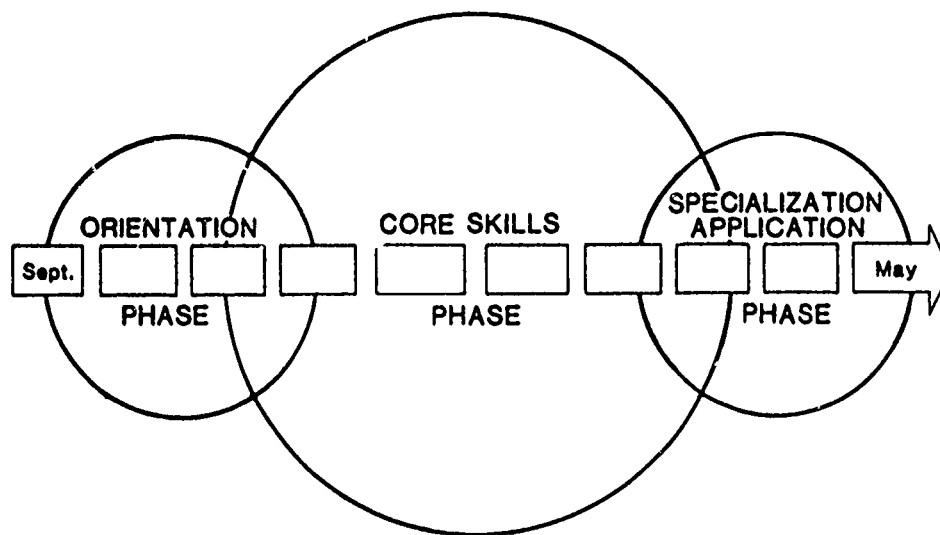
Keep these questions in mind when developing the orientation, core skills, and specialization/application phases of Extended Campus.

* <u>WHAT</u> is the content, knowledge and/or skills to be taught? What is the most important knowledge and/or skills for students to learn?

* <u>WHO</u> can best teach the knowledge to the students? I.e., school or private sector personnel. Consider first-line employees and management.

* <u>WHEN</u> should the knowledge and or skills be taught? What length of time will be spent on the information? Is one time of the year or cycle of the business "season" better than another? Are there times to avoid, like inventory?

* <u>WHERE</u> should the specific skills be taught? In the school classroom? At the private sector facility? At a simulated station? At an actual work station?

* <u>HOW</u> should the knowledge and or skills be taught? Which methods will assure optimal learning by the student: large or small group learning; one-on-one learning; self-directed learning?

* <u>WHY</u> evaluate? Evaluation decisions must be made during the planning phase, not after the course has been implemented. It should not become a goal in itself, nor be conducted only when there is a crisis. Evaluation is continuous process.

  Evaluation is often done to: 1) justify and provide accountability; 2) plan for the future; 3) identify improvements; and 4) measure impact.

  When developing the Extended Campus curriculum, consider WHAT will be evaluated by WHOM, WHEN, and for WHAT purpose.

CORE SKILLS PHASE WORKSHEET

The entire content of the curriculum centers around the core skills phase. The content of the orientation and specialization/application phases is based upon the core skills. Therefore, it is imperative to develop the core skills phase first.

The CORE SKILLS PHASE is a series of planned and structred learning activities enabling the students to master competencies needed to be successful in a cluster of occupations. All students master all core skills.

Answering the following questions will result in the identification of the core skills.

1. What career cluster have you chosen ? (Refer to pages IV-2 and 3 of the Extended Campus Implementation Guide)_____

2. List the departments within the business that are appropriate for an Extended Campus course. Some departments may not be accessible for safety or proprietary reasons. _____

    _____

    _____

3. List the job titles within each department._____

    _____

    _____

4. Do task lists exist for each department? Are tasks already written in job descriptions, trainig manuals, or curriculum information ?   Yes ____   No ____

5. If task lists exist, use a Structured Group Interview* to verify the tasks. This technique involves:

    a. identification of five to ten workers currently doing the job.
    b. a meeting to identify a list of competencies or verify an existing list
    c. the use of qualified facilitator to conduct the meeting
    d. utilizing the competency identified to develop curriculum

    *Contact the Illinois Vocational Curriculum Center at Sangamon State University, Springfield, IL (800) -252-IVCC for more information or assistance on the Structured Group Interview technique.

6. If task lists do not exist, interview individuals to identify tasks. Verify task lists using process outlined in the Structured Group Interview or the DACUM process. DACUM is appropriate if time permits, because it provides a comprehensive analysis of the occupation and sequencing of tasks performed. See appendix of Extended Campus Implementation Guide for definition of DACUM.

CORE SKILLS WORKSHEET (Continued)

7. Which of the tasks are most commc. ɔ multiple job titles within each department? Identify tasks within each department essential, desirable, or optional.

TASK	ESSENTIAL	DESIRABLE	OPTIONAL
_____	_____		
_____	_____		
_____			

8. Which of the tasks are most common in all the departments involved in the Extended Campus course? This list will produce the core skills for the course._____

_____

_____

_____

9. Do the core skills listed ɔlate to the career cluster?
   Yes____   NO____

10. Now that the core skills have been identified, you need to answer these questions:
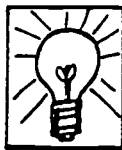
WHAT core skills will be taught?_____

_____

_____

WHO of the available personnel can best teach these tasks: manager, supervisor, employee, teacher, top-level executive?

_____

_____

HOW should core skills be taught to students? Which methods will assure optimal learning by the student: large or small group learning; one-on-one learning; self-directed learning? _____

_____

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CORE SKILLS WORKSHEET (Continued)

WHERE is the best place to teach the skill? In the school classroom? At the private sector facility? At a simulated station? At an actual work station?_____

_____

WHEN should the core skill be taught? Must the core skills be taught in a sequence? Should the core skills be introduced in the orientation phase? Is one time of the year or cycle of the business "season" better than another? Are there times to avoid, like inventory? _____

_____

11. Evaluation of the core skills phase.

HOW will the students be evaluated in this phase?_____

_____

_____

WHO will evaluate the students? _____

_____

• •

These are issues that need to be considered when determining evaluation of the students in the core skills phase:

* Will the pass/fail or graded system be used?

* How will this grade be documented?

* Will the students have an opportunity for input into their evaluation?

* Will employee/instructors evaluate the students?

* Will the Teacher/Coordinator evaluate the students?

* Will department heads of the private sector evaluate the students?

CORE SKILLS WORKSHEET (Continued)

* Will the evaluation be performance based?

* Will students be asked to prepare a written accounting or log of their learning experiences?

* Will students be administered pencil and paper tests?

* Will the evaluation include work attitudes and interpersonal characteristics of the student?

* Will the student's knowledge of theories being applied be tested?

NOTE: Refer to the Appendix of the Extended Campus Implementation Guide for instruments that could be used for student evaluation.

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ORIENTATION PHASE

The ORIENTATION PHASE is the first of the three sequential phases to be taught. The orientation phase provides the foundation for learning that will take place in the core skills phase. It is classroom learning conducted primarily by the Teacher/Coordinator. Decisions must be made on WHAT will be taught by WHOM and HOW the content will be taught WHERE.

The orientation phase can be developed by considering the following:

1. Orientation to Extended Campus

   * What are the objectives and course syllabus?
   * What are the codes of conduct?
   * What is the course format?
   * How is this course different from or similar to cooperative education programs and classroom experiences?

2. Orientation to the private sector

   * What are the major products and services of the business?
   * What is the organizational structure of the business?
   * What kinds of occupations are found within the facility?
   * What are the employment requirements for these occupations?
   * What orientation does a new employee experience? Can any of these experiences be applied to Extended Campus students?

3. Prerequisite knowledge for learning core-skills

   * What vocabulary is necessary?
   * What knowledge is mandatory for students to function in each core skill?
   * What reference books and materials should all students use?
   * What attitudes are most effective in the private sector?

4. Student pre and post assessment

   * What are the students education and career plans?
   * What do the students know about job opportunities and requirements of the career cluster?
   * What are the student's job-related aptitudes?
   * What are the student's present level of planning and decision-making competencies?
   * What are the student's profile of interpersonal skills?

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ORIENTATION WORKSHEET

Keep these questons in mind when developing the orientation phases:
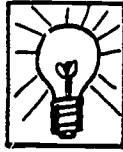
WHAT content will be taught in the orientation phase? (This should include orientation to Extended Campus and the business and detailed prerequisite knowledge. Review course outline on page IV - 14 and 15 of   Extended Campus Implementation Guide.)_____

_____

_____

WHO can best lead the orientation phase: Teacher/Coordinator, department head, employee, vice president, personnel manager?

_____

_____

HOW should the information be presented to the students: lecture, individual projects, case studies, group discussion, group or individual project? _____

_____

_____

WHERE is the best place to teach the orientation phase? In the classroom? In a conference room within the business?_____

_____

_____

HOW will the students be evaluated in the orientation phase?_____

_____

_____

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SPECIALIZATION/APPLICATION PHASE

The SPECIALIZATION/APPLICATION PHASE includes planned and structured learning activities specifically designed to enable students to pursue areas of personal interest in more depth and to apply core skills learned.

This phase is tailor-made to the situation. It might include student projects, either individual or group projects, as well as opportunities for students to learn more about a specific occupation or topic of interest to them. These projects or opportunities for students to spend extended time in different occupations may begin prior to their rotation through all the core skills. Scheduling of the learning stations may determine the sequence. Specialization and application could be occurring simultaneously.

Students may master skills specific to a department. Some tasks listed for the deparments may provide better opportunities for specialization or application, but not for the core skills phase. For example, in drafting a student may learn the basic core skill of correct lettering techniques and specialize in the department to learn how to lay out and draw a mechanical drawing using x-y-z coordinates.

When developing the specialization/application phase consider the following:

1. Describe learning experiences that enable students to extend and expand core skills mastered in new areas of special interest._____

   _____

   _____

2. Describe activities and/or projects (individual or group) that enable students to apply core skills learned._____

   _____

   _____

3. Caution is needed to assure students do not violate any criteria of the Fair Labor Standards Act. These criteria are the foundation which enable students to utilize resources within the private sector as learners and not be considered employees. The Fair Labor Standards Act criteria require that:

   * The training, even though it includes actual operation of the facilities of the employer, is similar to that which would be given in a vocational school.

   * The training is for the benefit of the trainees or students.

   * The trainees or students do not displace regular employees, but work under their close supervision.

* The employer that provides the training derives no immediate advantage from the activities of the trainees or students, and, on occasion, his/her operations may actually be impeded.

* The trainees or students are not necessarily entitled to a job at the conclusion of the training period.

* The employer and the trainees or students understand that the trainees or students are not entitled to wages for the time spent in training.

Also, keep these questions in mind while developing the specialization/application phase:

WHO will supervise students in their project/activity or expanded learning experience?_____

_____

HOW will the student's performance be evaluated?_____

_____

_____

_____

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TENTATIVE COURSE OUTLINE

A tentative course outline delineates specific content for an Extended Campus course and the sequence of learning activities. The goals and weekly activities of the course should be included. NOTE: Goals for an Extended Campus course were written pages II-4 and 5 of the Extended Campus Implementation Guide.

The course outline should be shared with the employee instructors so they are knowledgeable about their specific assignments.

Below is a sample skeleton Extended Campus outline.

COURSE OBJECTIVES:

1st - 2nd weeks
August
	Orientation to course:
	  * objectives, requirements, syllabus,
	  * codes of conduct
	  * differences from other classroom experiences
	Student pre-assessment
	
	Orientation to private sector:
	  * organizational structure, products, processes
	  * types of jobs and employment requirements
	  * tour of facility and/or departments involved
	  * introduction of key people involved in course
	  * use of new employee orientation process with students
	  * personnel department presentation regarding
	    most effective attitudes and conduct

3rd - 6th weeks
September
	Introduction of basic knowledge and skills:
	  * vocabulary specific to career cluster
	  * concepts and theories basic to core skills i.e., blue print reading
	  * classroom instruction
	  * homework assignments
	  * demonstrations
	Review and testing

7th - 10th weeks Sept. - Oct.	Continuation of pre-core skills learning: * i.e., digital logic, electrical diagrams Review and testing

11th - 12th weeks
November
	Introducation to core skills phase:
	  * review and explanation of departments
	  * review tasks to be learned
	  * introduction of instructors
	Inquiry techniques
	Job analysis of departments involved

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13th - 26th weeks Core skills phase:
Nov. - Feb.
* students rotate through learning stations on-site four days per week
* classroom instruction fifth day of week
discussion of experiences
presentations of employment issues
job-seeking skills: resume, interview, etc.
Review and testing

27th - 35th weeks Specialization/Application phase:
* students spend expanded time in department learning additional skills
* students complete individual or group project that apply core skills learned
Overview of course
Final exams
Evaluation of course and instructors by students
Recognition of employees who participated in the course

NOTE:
An actual course outline would include specific skills to be learned, time parameters, and names of employee instructor. After a course outline has been developed, the Teacher/Coordinator should convene all those involved to review the outline and make any necessary revisions.

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```
              /\
             /  \
            /    \
           / WARNING \
           \        /
            \      /
             \    /
              \  /
               \/
```

PREPARING FOR THE UNPREDICTABLE !

The Teacher/Coordinator needs to have a backup plan when employees can not teach students due to machinery breakdown, work overload, or absenteeism. Contingency plans need to be kept current. Here are some situations that require advanced preparation and one possible solution.

SITUATION 1:   Equipment failure shuts down a department for three days and three students are scheduled for that department.

SOLUTION 1:   An individualized learning packet on resume writing is assigned to each student.

SITUATION 2:   Inventory requires that all employees cannot accept students for a week.

SOLTUION 2:   A group lesson on job-seeking skills is taught to all students and a representative from the personnel department gives a presentaiton.

SITUATION 3:   In the middle of the cores skills cycle. a personnel change at the business reuqires a temporary elimination of that learning station, until the new hire becomes familiar with the new job.

SOLUTION 3:   The Teacher/Coordinator uses a simulation to teach the skills. In essence, the Teacher/Coordinator provides the learning station and instruction for the students.

SITUATION 4 : The school schedules a half-day pep assembly for the athletic team that is in the regional playoffs.

SOLUTION 4 :   This kind of situation can be more easily handled if students are scheduled four days a week at the private sector facility and the fifth day at a central location for classroom instruction by the Teacher/ Coordinator.

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LEARNING PACKETS

Learning packets can be a life saver! Developing learning packets for the core skills can save employee instructor's valuable time. Each department included in the Extended Campus course should have a learning packet. The packets include: specific information regarding the learning station; key vocabulary and concepts; lists of tools, equipment, and worker aids; competencies to be learned; and a rating scale to be completed by the employee instructor.

This kind of packet reduces the time employee instructors need to devote to the student and enables the student to be optimally self-directed. Learning packets also enable students to clearly know what is expected of them.

Learning packets need to be prepared jointly by the Teacher/Coordiator and the employee instructors. Often input is given by incumbent workers and their supervisors.

These learning packets may be introduced during the orientation phase or just before a student goes to the specific learning station. Although it takes time to develop learning packets, the investment pays off later.

A sample learning packet follows on next the page.

SAMPLE LEARNING PACKET

WIRING

DESCRIPTION OF DEPARTMENT:

It is the function of the wiring area of the Production Department to complete and run all wire connections; inspect and install front and rear panel assemblies, all connectors, LEDs, and switches. The wiring area also completes and installs all components which must be hand soldered. Workers in the area must be able to read wiring diagrams and complete high quality work.

TOOLS AND EQUIPMENT:

1. Pliers
2. Wire cutter
3. Wire stripers
4. Screwdrivers
5. Solder iron
6. Solder vacuum
7. Razor knife
8. Scribe
9. Continuity Tester
10. Wire crimpers
11. Wiring fixtures & jigs
12. LED testers
13. Heat gun
14. Wirewrap gun
15. PC board nibblers
16. Files
17. Nut drivers
18. Cable shear
19. Cable assembly press
20. Tape measures

21. Cable length meter
22. Board vises
23. Wire and tubing cutter
24. Hammers
25. Connector inserter
26. Connector extractor
27. Drills
28. Taps
29. Display board tester
30. Solder pot
31. Fiber-optic buffer and polisher
32. Optic magnifier
33. Automatic terminal crimper
34. Component bender
35. Punches
36. Deutsca fasteners
37. Open end wrenches
38. Spanner wrench
39. Allen wrench

WORKER AIDS:

1. Wiring diagrams
2. Subassembly manuals
3. Color-coded wiring charts
4. Cable drawings
5. Module drawings
6. Parts lists
7. Hardware drawings
8. Wiring description
9. Manufacturers instruction manuals
10. Manufacturers maintenance manuals
11. Procedural manuals

COMPETENCIES AND RATING SCALE:

Evaluate the student using the rating scale below. Circle the appropriate number to indicate the student's degree of skill. The numerical ratings are not intended to represent the traditional school grading system, but more the scale for company's skilled workers.

4 SKILLED....understands and performs tasks at an acceptable Industrial standard

3 MODERATELY SKILLED....understands tasks, but will require additional time and practice to perform at an acceptable level

2 LIMITED SKILL....requires close supervision to perform tasks; much improvement is required

1 UNSKILLED....requires constant supervision and/or cannot perform tasks

0 NO EXPOSURE....No experience or knowledge in this area; not applicable

0 1 2 3 4   1. Solder components to P.C. boards.

0 1 2 3 4   2. Receive information on the different types of electronic grade solder, and explain the advantages and disadvantage of each, along with the proper procedures for using each.

0 1 2 3 4   3. Make up or assemble different types of cables with connectors as terminators.

0 1 2 3 4   4. Prepare fiber-optic cables for use.

0 1 2 3 4   5. Recognize the uses of wire and cables.

0 1 2 3 4   6. Use hand tools required to wire on to P.C. boards.

0 1 2 3 4   7. Use wiring diagrams and other printed materials to complete wiring assemblies for the P.C. board.

0 1 2 3 4   8. Use and explain wiring harness boards.

0 1 2 3 4   9. Lace a wire assembly.

0 1 2 3 4   10. Maintain records to keep track of product flow and quality control.

0 1 2 3 4   11. De-solder I. C.'s without dmage to components.

0 1 2 3 4   12. Tin wire

0 1 2 3 4   13. Nibble and cut a P.C. board

0 1 2 3 4   14. Cut and strip solid and straded wire.

0 1 2 3 4   15. Use cable length meters and wire and tubing cutters

0 1 2 3 4   16. Asking questions or willingness to learn.

0 1 2 3 4   17. Cooperation

0 1 2 3 4   18. Ability to stay on task.

0 1 2 3 4   19. Use of technical vocabulary.

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STAFF DEVELOPMENT

<u>INTRODUCTION</u>

Staff development is essential for all individuals involved with the program: the Teacher/Coordinator, the private sector personnel, and the school personnel. Staff development not only includes orienting individuals to Extended Campus and their responsibilities, but also learning new skills and concepts that are important to the effectiveness of Extended Campus.

The Teacher/Coordinator will be assuming expanded roles and responsibilities to effectively implement the Extended Campus course. The Teacher/Coordinator will be required to: 1) become very knowledgeable about the business; 2) synthesize business operations into a course curriculum; 3) coordinate multiple learning situations simultaneously; 4) provide direction and advice to employee instructors. Staff development will enable the Teacher/Coordinator to master this new knowledge and skills.

Many private sector personnel will assume a new kind of teaching role during Extended Campus. It is necessary for them to learn:

* how to identify tasks
* how to prepare mini-lesson plans
* how to work with adolescents
* how to balance the dual role of employee and teacher

One of the benefits of staff development to private sector employee is their recognition of "teaching" as an integral component of their jobs. This recognition not only enhances their self-concept, but improves their job performance as they improve their "teaching" skills.

School administrators, counselors, and other faculty can benefit from staff development. They must understand how the skills learned in Extended Campus can be integrated into classroom activities and how the symbiotic relationship fostered in Extended Campus can be sustained.

Staff development must be continued throughout the Extended Campus course. It could be delivered through one-on-one contacts or regular meetings of all involved. Sharing experiences on a regular basis will help identify and solve problems and build confidence..

The amount of time invested in staff development is critical. All personnel must be aware of Extended Campus and its purpose, progress, successes and failures. A positive attitude toward Extended Campus is vital to its success.

The following paragraphs describe in detail staff development for the teacher/coordinator, private sector personnel, and school personnel.

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THE EXTENDED CAMPUS TEACHER/COORDINATOR

The EXTENDED CAMPUS TEACHER/COORDINATOR provides the necessary leadership to Extended Campus. This individual will not only facilitate staff development for others involved in Extended Campus, but seek self-development opportunities. Self-directed learning opportunities to be considered by the Teacher/Coordinator include:

* obtaining released time to spend at the private sector facility

* making regular visits to the private sector facility

* developing a solid relationship with a person who knows the most about the business

* becoming acquainted with each department head and the people in each department who will be teaching

* seeking methods to improve the course curriculum and format

* attending staff meetings of private sector personnel

* attending new employee training for private sector personnel

* learning technical competencies used within the business

* attending seminars/workshops with private sector personnel

* learning about comptency-based curriculum

PRIVATE SECTOR PERSONNEL

PRIVATE SECTOR PERSONNEL will be actively engaged in the teaching process. Even though employees are involved in a teaching function with peers and/or subordinates, they may not be adequately prepared for teaching students. Therefore, staff development will benefit them as employees as well as Extended Campus instructors.

The time invested in preparing private sector personnel for their Extended Campus experience is invaluable. Employees need to feel confident abou't their new teaching role. They need feedback regarding the performance of their new role. Private sector personnel need to be told they are contributing to a worthy cause and that administration supports their efforts.

The Teacher/Cooordinator or representatives from the school should organize staff development for the personnel who will teach the students. The following topics should be considered when preparing the private sector employees for their new teaching role:

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* reviewing the teaching/learning process
* relating to youth
* teaching skills vs. manager or employee skills
* balancing the employee and teacher role efficiently
* relaxing and feeling comfortable with the teacher role
* evaluating the progress of the students
* reporting process to be used with the Teacher/Coordinator

These topics could be delivered through a series of short seminars for everyone or through small group presentations.

SCHOOL PERSONNEL

The administrators, counselors, and other faculty members must understand the purpose, scope, and depth of Extended Campus. The more that is understood about Extended Campus and the responsibilities of each person involved, the more successful it will be.

It is important that counselors understand Extended Campus since they may be directly involved in the selection and/or recruitment of the students. They should understand that any student can benefit from Extended Campus including the college-bound, the slow learner, or the special population student.

Administrators need to understand the concept that is being added to their school's curriculum. They should be able to reiterate at any time the benefits of the concept to the students, private sector and the school.

Other faculty members might be willing to help students relate Extended Campus course experiences to classroom activities if they understand the purpose and content of the course. This understanding could lead to additional Extended Campus courses.

Consider the following staff development opportunities for school personnel:

* scheduling visits to the private sector facilities

* observing students during the Extended Campus course

* conducting in-service on what Extended Campus is and how it is implemented

* conducting informal discussions on how Extended Campus could be incorporated into their classrooms

* involving school personnel with the implementation team

* scheduling classes for a field trip to the business

* involving Extended Campus students in giving demonstrations in the classroom

STAFF DEVELOPMENT (Continued)

* using private sector personnel to make presentations at the school

* asking Extended Campus students to prepare displays for the school library

* involving school board and advisory representatives in Extended Campus activities

Note: Some schools have developed staff development programs and college courses modeled after the Extended Campus concept.

STUDENT RECRUITMENT AND SELECTION

How the students are recruited and selected plays a key role in the success of Extended Campus. Students must be well informed about the similarities and differences of Extended Campus to the other courses in school. Parents need to be informed about the opportunity.

The number of students selected for Extended Campus is dependent upon several factors: 1) the maximum number that will not affect productivity in the private sector; 2) existing student-teacher ratios in school districts that are acceptable; and 3) the minimum number that will make Extended Campus feasible.

Any student can benefit from Extended Campus, including the college-bound, slow learner, or special population student. Several methods to consider when recruiting and selecting students include:

RECRUITMENT:

- prepare an informational brochure to distribute to all students, parents and private sector personnel. This brochure should reflect the unique characteristics of the course and how students will benefit from the experience.

- conduct an awareness program for students and parents at the school and/or the private sector facility

- arrange for Extended Campus students to share their learning experiences with other students.

- identify vocational and other specific classes for special presentations.

- send a letter directly to parents introducing the concept and specific course details.

SELECTION:

- interested students complete an application

- specific students are asked to complete an application

- Teacher/Coordinator and counselors interview all students who apply

- personnel manager of private sector interviews and screens students who apply

- students are accepted on a volunteer basis

- counselor recommendations are accepted

- Teacher/Coordinator personally chooses students

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MEMORANDA AND UNDERSTANDING

<u>SCHOOL AND PRIVATE SECTOR</u>

A memorandum of understanding between the private sector and school should be written and kept c   9. When the initial commitment is gained for Extended Campus, a letter of commitme,ii formalizes the partnership. As the course is developed, a more formal memorandum of understanding should be prepared. Items to include:

* roles, responsibilities, and obligations of each partner involved

* transportation, insurance

* maximum and minimum class size, level of student to be involved

A sample memorandum of understanding is included in the Appendix of tte Extended Campus Implementation Guide.

<u>SCHOOL AND STUDENTS</u>

Permission forms signed by the students and their parents should also be on file prior to the beginning of an Extended Campus course. Sample parental forms are included in the Appendix of the Extended Campus Implementation Guide.

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FIELD TESTING

The first year Extended Campus is conducted should be considered a pilot year. Monitoring the progress of Extended Campus will assist in the identification of situations that may need immediate attention.

At the end of the first year, it will be easier to review the situations and make the necessary adjustments before the beginning of the second year.

It is difficult to anticipate all the situations that need reviewing. Some to consider include:

* what is the optimum number of students for the course?

* were the prerequisites in the orientation phase adequate for the core skills phase?

* did students spend the right amount of time at learning stations?

* was the level of difficulty of core skills adequate?

* was the content of the orientation adequate?

* were the activities of the specialization/application phase appropriate?

* was the time spent supporting the private sector employees adequate?

* how effective were the printed materials given to students?

* how was the blend of teacher-developed vs. commercial materials/references?

* was there an adequate number of regular meetings between the Teacher/Coordinator, private sector personnel, and school personnel?

* what materials need revising?

* which employee (s) need more assistance?

It will also be necessary to monitor these items throughout the existence of Extended Campus. Additional information on evaluation is located in Section V of the Extended Campus Implementation Guide.

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DO'S AND DON'TS TO REMEMBER WHEN IMPLEMENTING EXTENDED CAMPUS

DO:

* Prepare employees for interfacing with students

* Provide students same information given to new employees

* Keep communication lines open between private sector and school personnel

* Conduct periodic evaluations to monitor Extended Campus course

* Use feedback from students to improve Extended Campus

* Use feedback from private sector personnel to improve Extended Campus

* Obtain input from all levels of private sector for all phases of Extended Campus i.e., core skills, specialization, orientation

DON'T:

* Expect perfection; learn from the unpredictable and be flexible

* Rush into Extended Campus without adequate planning; haste makes waste

* Expect everyone to be positive about Extended Campus; people often resist changes

* Be afraid of the "rumors"; listen to rumors and learn from them

* Be discouraged about fluctuating attitudes; success sells itself

* Try everyone's suggestions; give the initial plan time to work

* Expect all employees to be comfortable with students; give them support and suggestions

* Stereotype the students; they are all individuals

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SECTION IV CHECKLIST

Check the following tasks that have been completed

	COMPLETED	NOT COMPLETED
Teacher/Coordinator assumed appropriate responsibilities.	_____	_____
Implementation team functioning. a. appropriate practitioners involved b. notes on tasks completed on file	_____	_____
Career cluster identified.	_____	_____
Tasks for each core skill written.	_____	_____
Evaluation tools for core skills identified.	_____	_____
Orientation phase developed.	_____	_____
Evaluation tools for orientation phase identified.	_____	_____
Specialization/application phase developed.	_____	_____
Evaluation tools for specialization/application phase defined.	_____	_____
Staff development opportunities for Teacher/Coordinator, private sector, and school staff identified and implemented.	_____	_____
Student recruitment and selection processes determined.	_____	_____
Student recruitment and selection completed.	_____	_____
Memorandum of understanding₍between₎ partners on file.	_____	_____

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EXTENDED CAMPUS
STUDENT EVALUATION FORM

This sample evaluation can be used by Employee Instructors to rate each students's learning performance.

The result will be helpful in determining student grades for the Extended Campus course.

Additional comments would be beneficial to the student or help improve the total Extended Campus experience.

Student's Name   Date of Learning Experience

	Not Applicable	Excellent	Very Good	Fair	Needs Improvement (Comments)
A. Punctuality					
B. Actively Listens					
C. Asks Quality Questions					
D. Asks Sufficient Questions					
E. Courteous					
F. Stays on Task					
G. Follows Directions					
H. Respects Equiptment and Property					
I. Communication Skills					
J. Math Skills					
K. Quick to Learn					

Additional Comments:

_____

_____

Name of Person Completing This Form   Date

Return to: _____   By this date: _____

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SECTION V

EVALUATION

Evaluation must be continuous and an integral part of every phase of Extended Campus. Checklists have been included at the end of Sections II, III, and IV of this guide. These are examples of formative evaluation that provide benchmarks for the planning and implementing process.

This section concentrates on a summative evaluation of Extended Campus. Methods for evaluating the effect of Extended Campus and its impact on its students and the private sector are presented.

Summative evaluation focuses on past activities. The overall results, strengths, and weaknesses are delineated by summative evaluations. This information justifies the program being evaluated and is the basis for improvement.

Answers to the following questions provide essential data for an evaluation:

* How well are we doing?
  (Identifies expected and unexpected outcomes/events)

* What probable causes affected the outcomes?
  (Identifies possible causes for expected and unexpected results)

* What can be done differently to improve the effectiveness and efficiency of Extended Campus?

The planning and implementing teams, the Teacher/Coordinator, instructors, students, private sector personnel, and school administrators act as data sources by answering the evaluation questions.

Checklists have been included in Sections II, III, and IV of the Extended Campus Implementation guide to assist in the evaluation of the progressive phases of planning, developing and implementing Extended Campus. Information already gathered from these checklists is another source of data for a summative evaluation of Extended Campus.

Evaluation results should be shared with the key decision-makers from the school and private sector. They must be aware of the impact, strengths, and weaknesses of Extended Campus.

HOW WELL ARE WE DC'NG?

Indicators for determining how well Extended Campus is doing include:

* the accomplishment of Extended Campus goals*

* the number of students interested in Extended Campus

* the number of students enrolled in Extended Campus

* the number of students who passed the course

* the number of students who dropped out of the course

* opinions from students taking the course and those who have dropped out

* opinions of the employee/instructors

* opinions of the parents/community

* opinions of the private sector administrators and employees

* opinions of school administrators

* opinions of counselors

* opinions of school board members

* opinions of teachers of other classes in which Extended Campus students are enrolled

*Goals of the course are listed on pages III-4 and 5 and IV-14 of the Extended Campus implementation Guide.

WHAT ARE THE STRENGTHS AND WEAKNESSES?

The statements below summarize how well Extended Campus is doing.

1. Identify aspects of Extended Campus that are well executed.

2. Identify areas of Extended Campus that need improvement.

3. Were the stated goals accomplished? Refer to goals written on pages III-4 and 5 and IV-14 of the Extended Campus Implementatio Guide.

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WHAT PROBABLE CAUSES AFFECTED THE OUTCOMES?*

The probable causes of outcomes could be identified by answering the following questions:

* Even though tasks on the checklists were not completed, did implementation continue? (Review completed checklists at the end of Sec' ,ns II, III, and IV of the Extended Campus Implementation Guide.)

* Can external variables be identified that affected Extended Campus?

* What problems surfaced during the decision-making and implementing phases? Were they adequately addressed?

* Were the appropriate people involved in the decision-making, developing, and implementing phases?

* Was adequate time spent on the decision-making, developing, and implementing phases?

* Was adequate information available to planners and decision-makers?

*EXAMPLE OUTCOME: Enrollment increased the year of the course.
    EXAMPLE CAUSE: Good recruitment techniques

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ACTION PLAN

After r. /iewing the probable causes of outcomes, an Action Plan must be prepared.

1. List the areas of Extended Campus that have been well executed and need to be continued.

2. List the areas of Extended Campus that need improvement.

3. Develop an ACTION PLAN that includes items to be continued and improved. What has to be done?   How and when will it be executed?   Who will do it?   What resources are needed?

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Extended Campus Action Plan

What is to be done	How it will be done	When it will be done	Who will do it	Resources needed

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PLAN FOR DISSEMINATING EVALUATION DATA

It is vital to share the results of the summative evaluation. The key decision-makers from school and the private sector must be informed about the evaluation and its outcomes.

The report should include:

* a description of Extended Campus (scope, goals, methods, audience)

* summary of evaluation methods

* results of the evaluation

* action plan

Presentation of the results is critical.. How will the evaluation results be disseminated?

TARGET AUDIENCE	WHEN	WHERE	HOW	WHO
		90		

DATA GATHERING TECHNIQUES

The following pages delineate sources of data and sample insturments. There are several techniques that could be used to gather the information from the data sources. Techniques to consider include:

* telephone survey

* personal interview using a questionnaire

* mailed questionnaire

* rating sheet, checklist, or observation sheet with specific criteria

* pre-and post-tests

* case study

* review of existing documents

OPINIONS OF THE STUDENTS

Opinions of the students can be gathered by asking the following questions:

* How have they benefited from their Extended Campus experience?

* How have they changed their career goals?

* How have they changed their high school course plan?

* What would they change in the Extended Campus course?

* Whould they recommend Extended Campus to friends and why?

Page I-8 of the Extended Campus Implementation Guide lists the benefits students can gain from an Extended Campus experience. The number of benefits students can identify may also provide evidence for a summative evaluation.

SAMPLE STUDENT EVALUATION SURVEY

Name_____ Year____

Yes	No	
___	___	Do you feel_____provided a meaningful course alternative for you this semester?
___	___	Do you feel _____ resopnded to some of your personal educaltonal needs this semester?
___	___	Do you feel your planning skills have improved after participating in _____?
___	___	Do you feel _____ has helped you increase your ability to communicate with adults?
___	___	Has _____ helped you be more realistic about your career-planning/decision-making?
___	___	Has_____ provided you more educational Independence?
___	___	Has _____ allowed you opportunities to evaluaₑe occupations traditionally employing one sex and attitudes and values related to crossing those sex roles?
___	___	Do you feel that as a result of _____ you arₑ betₑer prepared to meet the demands of full-time employment?
___	___	Do you feel_____ has changed your attitudes toward school?
___	___	Do you feel your _____ Teacher/Coordinator is sincerely concerned about you as a student and as an indiviual?
___	___	Do ʹou feel you are more self-reliant now than at the beginning of the year?

What did you like best about_____?

What did you like least about_____?

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SAMPLE STUDENT EVALUATION

_____   _____
(name of course)   (name of school)

1. Is _____ what you expected when you enrolled?

   ___ Better ___ Worse ___ Exactly what you expected
   ___ Not sure

2. To what degree will _____ help you in the future?

   ___ Extensively ___ Moderately ___ Somewhat ___ Not at all

3. Would you recommend _____ to a friend?

   ___ Yes   ___ No

4. Would you take _____ (or one like it) again?

   ___ Yes   ___ No

5. As a result of what you learned in _____, to what extent have you
   changed your post high school career plans?

   ____ Extensively ___ Moderately ___ Somewhat _____ Not at all

6. How would you rate _____ compared to other courses you have taken?

   ____ Better   ____ A little better ___ Same ___ Worse

7. Who influenced you most to enroll in _____?

   ___ Teacher   ___ Parent
   ___ Principal   ___ Teacher/Coordinator
   ___ Counselor   ___ Friend
   ___ Myself   ___ Other (who?)

8. Did _____ help you make a career decision?
   ___ Yes   ___ No

9. Do other students not in _____ view it positively?
   ___ Yes   ___ No   ___ Not sure

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SAMPLE STUDENT EVALUATION (Continued)

10. What courses would you recommend prior to taking _____?

11. Now that you have completed _____, what courses would you like to take?

12. What changes would you recommend for the course?

OPINIONS OF THE PRIVATE SECTOR

Employee/instructors will have individual contact with the students for a concentrated length of time. They can provide excellent information on the student's achievements of tasks, the student's "work" attitude, as well as how they themselves perceive the success of Extended Campus.

Management and other employees can also provide an overall perspective regarding their involvment in Extended Campus.

Sample questions for management and employees include:

* How has the public's image of the company been effected?

* How have employees been effected?

* Whould they encourage othe businesses to become involved in Extended Campus?

* Are students gaining a realistic insight into what it is like to work in a business/industry?

Benefits to the private sector are listed on Page I-10 of the Extended Campus Implementation Guide. A comparison of the identified benefits against that list may serve as an indication of how well Extended Campus is doing.

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SAMPLE EMPLOYEE/INSTURCTOR EVALUATION

I. FROM YOUR PERSPECTIVE AS AN EMPLOYEE/INSTRUCTOR RATE THE FOI LOWING STATEMENTS:

	AGREE	DISAGREE
a. The students benefited from their experience.	_____	_____
b. The course was a worthwhile use of my time.	_____	_____
c. My involvement with the students in _____reduced the overall productivity of my department.	_____	_____
d. My involvement with the s.udents in _____ increased the overall producivity of my department.	_____	_____
e. I enjoyed my experience in _____.	_____	_____

2. INDICATE HOW STUDENTS SPENT TIME IN YOUR DEPARTMENT BY CHECKING THE APPROPRIATE CATEGORIES BELOW:

	OFTEN	SOMETIMES	SELDOM	NEVER
a. Observing activities				
b. Researching				
c. Performintg tasks				
d. Talking to me				
e.. Talking with other department personnel				
f. Individual study				
g. Other (specify)				

_____

_____

3. Did the _____Teacher/Coordinator provide you with necessary information to help you direct students' learnings in your department?

___ Yes ___ No

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4. Do you feel the course functioned as you thought it would when you were recruited as an employee/instructor?

    ___ Yes   ___ No

5. Do you think the students have an increased interest in your facility?

    ___ Yes   ___ No

6. Do you feel the students you taught were interested in the concept of
    _____?

    ___ Yes   ___ No

7. How have the employees in your department reacted to the students?

    ___ Favorably   ___ Unfavorably

8. How has the top level management reacted to _____ students?

    ___ Favorably   ___ Unfavorably

9. Based on the staff and students you have met, how effective do feel _____ is ?

    ___ Effective   ___ Ineffective

10. What changes would you recommend for the course?

OPINIONS OF PARENTS

Parents of students provide a persepective on the success of Extended Campus. Questions to consider asking parents include:

* Would they want their son or daughter to participate in Extended Campus again?

* Was their son or daughter motivated to learn in this course and how did this motivation compare to other school experiences?

* Did Extended Campus respond to some of their son's/daughter's educational needs?

* How has Extended Campus helped their son/daughter be more realistic about career planning?

* How has their son/daughter become prepared to meet the demand of the working world?

* Can they identify benefits their son/daughter has gained from Extended Campus?

* Would they recommend Extended Campus to other parents?

SAMPLE PARENT EVALUATION SURVEY

Name _____ Year ____

	Yes	No

1. Do you feel_____provided your son/daughter a meaningful course alternative this year?

2. Do you feel_____responded to some of your son's/daughter's personal educational needs?

3. Do you feel your son/daughter has become more self-reliant since participating in _____?

4. Do you feel _____ has helped increase your child's ability to communicate with adults this year?

5. Has_____helped your son/daughter be more realistic about career-planning/decision-making?

6. Do you feel_____has provided your son/daughter more education independence?

7. Do you feel that as a result of_____, your son/daughter is better prepared to meet demands of full-time employment?

8. Do you feel your son/daughter has made a positive change in his/her attitude towards school?

9. Do you feel the _____ Teacher/Coordinator was sincerely concerned about your child as a student and as an individual?

ANY COMMENTS YOU CARE TO MAKE:

SAMPLE PARENT OPINION SURVEY

1. How well does _____ compare overall with past school experiences of your son or daughter?

   Much Worse
   1   2   3   4   Much Better
                                              5

2. If you had it to do over again, would you want your son or daughter to participate in _____?

   Definitely No
   1   2   3   4   Definitely Yes
                                              5

3. How well do you think your son or daughter likes _____ compared with past school experiences?

   Much Worse
   1   2   3   4   Much Better
                                              5

4. How often did your son or daughter talk to you about _____ activities?

   Almost Never
   1   2   3   4   Almost Daily
                                              5

5. In comparison with past experiences in regular schools, how motivated do you feel your daughter or son was to learn in _____?

   Much Less
   1   2   3   4   Much More
                                              5

6. How would you rate the general quality of _____ instructors and coordinator?
   Poor   Excellent
   1   2   3   4   5

7. What effect, if any, has _____ had on helping your son or daughter form career plans?

   Definitely Bad
   1   2   3   4   Definitely Good
                                              5

OPINIONS OF SCHOOL PERSONNEL

School administrators, counselors, and other teachers of Extended Campus students offer perspectives on the success or failure of Extended Campus. Their opinions can be important in determining how Extneded Campus fits into the school curriculum and how other courses can be used to support Extended Campus.

Questions to ask of these individuals include:

* Do they clearly understand the concept and purpose of Extended Campus?

* Is this type of business/industry partnership beneficial to education? If yes, how?

* How are students better prepared for the future by their Extended Campus experience?

* Could the concept of Extended Campus be used to teach other high school courses?

* Does Extended Campus have a positive image among the faculty?

* Would they recommend Extended Campus to other Schools?

Page 1 - 9 of the Extended Campus Implementation guide identifies benefits the school can receive from an Extneded Campus experience. How many of these were cited by the administrators and faculty?

OPINIONS OF THE SCHOOL BOARD/ADVISORY COUNCIL

School boards establish policy. They determine if Extended Campus will be continued as part of the school curriculum. They can provide valuable feedback about the success of the program.

Questions to consider asking them include:

* Is Extended Campus what they expected?

* What benefits can they identify?

* Would they encourage other school boards to investigate the implementation of an Extended Campus model?

APPENDIX

DEFINITION OF TERMS

COOPERATIVE VOCATIONAL EDUCATION - an educational program which combines school with the working world giving academic credit to students for work which is sponsored jointly by school and business and which is supervised

CORE SKILLS - series of planned and structured learning activities enabling students to master competencies needed to be successful in a cluster of occupations

DACUM - an occupational analysis technique which uses incumbent workers to develop a list of competencies into a matrix which can be used for curriculum development

EXTENDED CAMPUS - partnership between education and private sector provides opportunities for students to acquire skills and knowledge in a cluster of occupations

FAIR LABOR STANDARDS ACT - federal work regulations

IMPLEMENTING GROUP - individuals who review resources of selected school(s) and private sector(s); identify core skills; develop the curriculum; and implement and evaluate Extended Campus

ORIENTATION PHASE - series of planned and structured learning experiences enabling students to understand: 1) the purpose and format of Extended Campus activities; 2) the purpose and operational functions of the private sector; and 3) prerequisite knowledge and skills necessary in core skills phase

PLANNING GROUP - individuals who analyze the community; make a commitment to Extended Campus; and develop the initial plan for Extended Campus implementation

PRIVATE SECTOR - commerce, industry, labor, and government

SPECIALIZATION/APPLICATION PHASE - planned and structured learning activities specifically designed to enable students to pursue areas of personal interest in more depth and apply core skills learned

TEACHER/COORDINATOR - individual who administers Extended Campus and provides linkage between school(s) and private sector

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WHEN CAN A STUDENT ENGAGE IN A NON-PAID WORK EXPERIENCE?

In accordance with the Fair Labor Standards Act in general, and the Department of Labor Publication WH-1297, six criteria must be met to allow students to engage in non-paid work experience. The six criteria include:

1. The training, even though it includes actual operation of the facilities of the employer, is similar to that which would be given in a vocational school.

2. The training is for the benefit of the trainees or students.

3. The trainees or students do not displace regular employees, but work under their close supervision.

4. The employer that provides the training derives no immediate advantage from the activities of the trainees or students, and on occasion his/her operations may actually be impeded.

5. The trainees or students are not necessarily entitled to a job at the conclusion of the training period.

6. The employer and the trainees or students understand that the trainees or students are not entitled to wages for the time spent.

SAMPLE MEMORANDUM OF UNDERSTANDING
between

_____
(name of school)
and

_____

(name of private sector)

_____

(name of course)

1. **PURPOSE:**
   The purpose of the two-semester course is to provide students with learning experiences that cannot be duplicated in the classroom. Students will be attending their class within the facilities of _____ for two periods of the day during which time they will progressively move from group instruction to individual learning projects under supervision of a certified teacher.

2. **DEVELOPMENTAL YEAR RELATIONSHIP:**
   A special partnership between the Illinois State Board of Education Department of Adult, Vocational and Technical Education,_____ School, and _____ _____ Corporation will be formed during the 19__ - __ school year. This partnership demands teamwork and communications.

   A certified teacher from _____ School will work with the personnel at _____ Corporation in developing _____. This teacher will coordinate the progress of the course with the State Board of Education Department of Adult, Vocational and Technical Education, _____ School, and _____ Corporation.

   Teamwork and clear communication of all previously mentioned parties is essential for the development of the course. The first year will involve a constant process of planning, testing, and evaluating the results. The following year the course will run as part of the course offerings. Representatives of the previous mentioned parties will continue to maintain communication and update the course.

   The students will be involved in much the same manner as cooperative vocational education programs, but will not be paid.

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SAMPLE MEMORANDUM OF UNDERSTANDING (Continued)

3. NON-PAID LEARNING:

_____ Corporation and _____
School agree to monitor the learning conditions and assure that
the Fair Labor Standards are followed for students/trainees.
The Fair Labor Standards Act provides the ultimate criteria and
standards against which to judge issues related to the legality
of employment relationships.

If all six of the following criteria apply, the trainees or
students are not employees and need not be paid.

    1. The training, even though it includes actual
       operation of the facilities of the employer,
       is similar to that which would be given in
       vocational school.

    2. The training is for the benefit of the trainees
       or students.

    3. The trainees or students do not displace regular
       employees, but work under their close supervision.

    4. The employer that provides the training derives
       no immediate advantage from the activities of the
       trainees or students, and on occasion his
       operation may actually be impeded.

    5. The trainees or students are not necessarily
       entitled to a job at the conclusion of the
       training period.

    6. The employer and the trainees or students
       understand that the trainees or students are
       not entitled to wages for the time spent in
       training.

4. STUDENT RESPONSIBILITIES:

The student, together with his/her parents or guardian, will
be responsible for his/her behavior and shall comply with
_____ School rules and regulations as well as with
the rules and regulations established by _____
Corporation.

The most restraining rule and regulation will apply where such
conditions exist.

5. _____ School agrees to provide:

    a. student transportation to and from the attendance center and _____ Corporation

    b. a certified teacher to teach and supervise students

    c. teacher compensation

    d. a maximum of _____ students

    e. a certificate of liability covering teacher and students

6. _____ Corporation agrees to provide:

    a. a location within the corporation that will hold _____ students to be reserved two hours per day for conducting group instruction.

    b. a desk or table space for the certified teacher

    c. personnel time to give demonstrations, lectures, presentations, and one-to-one consultation to groups of students and to individual students

    d. personnel time to meet with project staff in planning and evaluating the components of the project as they progress

AGREED TO BY:

_____   _____
    Corporation President   School Superintendent

_____   _____
        Date   Date

SAMPLE STUDENT APPLICATION FORM

Name_____ Sex M F Date_____

Address_____ City_____ Zip_____

Phone _____ Age _____ Birth Date_____

Year in school 9 10 11 12 Social Security No._____

Counselor_____

Present schedule:

Period 1 _____   Period 5 _____

Period 2_____   Period 6 _____

Period 3 _____   Period 7 _____

Period 4 _____   Period 8 _____

Courses you plan to take next semester:

_____   _____

_____   _____

_____   _____

_____   _____

How do rate yourself academically?

Excellent   Good   Fair   Poor
(A's and B's)   (B's and C's)   (C's and D's)   (D's and F's)

What are the three favorite subjects or classes you have taken?

1.

2.

3.

What are your career plans after high school?

STUDENT APPLICATION FORM (Continued)

List special skills, hobbies, and work experiences which you do well and/or enjoy. Examples: typing, welding, building radios, painting, reading, basketball, co-curricular activities.

1.

2.

3.

4.

****
DO YOU HAVE ANY SPECIAL HEALTH PROBLEMS?   ___ YES   ___NO

DO YOU HAVE SCHOOL ACCIDENT INSURANCE?   ___YES   ___NO

DO YOU HAVE A DRIVER'S LICENSE?   ___YES   ___NO

ARE YOU WORKING FOR WAGES NOW?   ___YES   ___NO

ARE YOU INVOLVED IN ANY AFTER SCHOOL ACTIVITIES?   ___YES   ___NO

DO YOU LIKE WORKING INDEPENDENTLY?   ___YES   ___NO

****

Father/Guardian_____ Phone ___ _____

Occupation_____

Address (if different from yours)_____

City_____ State _____ Zip _____

Mother/Guardian _____ Phone _____

Occupation _____

Address (if different from yours)_____

City _____ State _____ Zip _____

SAMPLE PARENTAL CONSENT FORM

We, _____ parent(s)/guardian of_____

_____ have been advised by _____ School

as to the nature of the training the student will receive during

the forthcoming educational course,_____, at

the_____ Corporation in _____,

Illinois, including the operation by the student of machinery at the

corporation. We elect to, and do assume, all risk for claims that

either of us has or may have in the future or that any person

claiming through either of us may have, or claim to have, against

_____ Corporation, its employees, officers, agents,

successors or assigns in conjunction with _____,

including, but not limited to claims for personal injury of the

student, and we knowingly and voluntarily expressly release

_____ Corporation, its employees, officers, agents,

successors or assigns from all liability from any such claims

arising from _____.

Date: _____ , 19___

_____   _____
(Parent/Guardian)   (Address)

_____   _____
(Student)   (Address)

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SAMPLE PARENTAL CONSENT FORM (Continued)

_____ has my permission to enroll in the Extended
Campus course titled _____, held within
the facilities of the_____ Corporation in
_____, IL.

This course is offered through a joint agreement between
_____ School and _____ Corporation and
is therefore an extension of the school, and students will follow
all school rules and responsibilities that are relevant to courses
conducted within the school.

It shall be understood that students are guests of_____;
therefore, students are expected to follow the rules set forth by
_____ when at the corporate facilities.

In addition, any violation of the following rules, as defined in
the Student and Parent Handbook, will result in the immediate
removal of the student from the class, and said student will be
issued a failing grade for that semester.

OFFENSE	HANDBOOK SECTION

In addition to the above offenses, the student may be removed for
any offense deemed necessary by _____ personnel and
school personnel.

A certified teacher will closely supervise the students. Students
will have a unique opportunity that cannot be duplicated within the
school classrooms. Students will be able to learn from experts in
the field on high technological equipment. They will see
demonstrations, hear presentations, observe sophisticated automated
equipment in use, and talk one-to-one with employees using the
latest tools, equipment and skills in _____ industry.

Students will be able to pursue their interests and complete
projects that promote their educational development. Students are
expected to gain knowledge and skills related to high technology
occupations, but also to gain a clearer picture of their own goals
and what is needed to reach those goals.

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PARENTAL CONSENT FORM (Continued)

Students are learners, not workers. They will not be paid, nor will they do productive work. Students are to be productive learners and will be evaluated accordingly.

_____ School will provide transportation to and from the school. All students must ride the bus, unless written consent is given by both the parent/guardian and the _____ School principal.

_____	_____
Student Signature	Date

_____	_____
Parent/Guardian Signature	Date

_____	_____
Teacher Signature	Date

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JOB ANALYSIS

Students can use this job analysis form to structure an investigation of various occupations within a company. They can acquire information on occupations, the nature of the occupations, the education required for the occupations, and employment requirements for these occupations.

A job analysis or investigation could be conducted during the orientation or core skills phases of Extended Campus.

STUDENT _____ DATE _____

A. Name of job: _____

B. What other names or job titles are used for the occupation? _____
_____

C. What is the major product or service produced by this job? _____
_____

D. What criteria is used to determine quality? _____
_____
_____

E. List the essential tools, equipment, machines and working aids this person must know how to use: _____
_____
_____
_____
_____
_____

F. What specific school subjects are most related to the work being performed? List specific school courses that would be most helpful: _____
_____
_____

G. Rate the job according to the degree the following skills and abilities are critical:

	Essential	Important	Not Needed
Artistic (using visual and/or auditory media for creating products that are both functional and appealing)	1	2	3

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G. (continued)

	Essential	Important	Not Needed
Clerical (copies, transcribes, organizes and/or posts information)	1	2	3
Creativity (creates new ideas or things)	1	2	3
Coordinates (decides time, place, and sequence of processes, people or things)	1	2	3
Leadership (influences and persuades others to do what needs to be done)	1	2	3
Manual dexterity (uses hands and fingers for precise and/or delicate work)	1	2	3
Mechanical (applies knowledge of geometry, physics and math in using or repairing machines)	1	2	3
Musical (uses knowledge of music)	1	2	3
Measurement (measures and/or interprets measurements - distance, size, shape, volume, temp., etc.)	1	2	3
Computes (uses numbers to count, record and/or solve mathematical problems)	1	2	3
Social/interpersonal (relates conscientiously, courtesly and appropriately to others)	1	2	3
Plans (meets deadlines on time without much supervision)	1	2	3
Physical (uses body strength, agility and/or coordination)	1	2	3

G. (continued)

	Essential	Important	Not Needed
Solves problems (identifies problems, gathers data, thinks of alternatives, tests alternatives for results)	1	2	3
Supervises (monitors, coaches and evaluates other workers)	1	2	3
Writing (writes using correct grammar and correct technical terminology)	1	2	3
Speaking (speaks clearly using correct grammar and technical terminology)	1	2	3

H. What are the essential personal attributes that are necessary for a person to do well in this job?_____

_____
_____
_____

I. Which of these attributes can be learned and/or improved?

_____
_____
_____
_____
_____

by
by
by
by
by

J. How would you learn and/or improve these respective attributes?

_____
_____
_____
_____
_____

K. What kind of formal education and/or training is needed? _____

_____
_____

L. List any informal, extra-curricular or social activities that would be beneficial for learning the knowledge, skills and dispositions needed to be successful on the job:_____

_____
_____
_____

M. What is the future of this particular occupation likely to be ten years from now?_____

_____
_____

JOB ANALYSIS

N. List three similar or related jobs a person who does this job might be able to do and might enjoy doing:_____

_____

_____

O. What influence might this job have on one's lifestyle (e.g. family life, geographic location, leisure time, friends, etc.). Be specific in your response

_____

_____

P. What is the range of pay a worker might expect to earn in this occupation?_____

_____

Q. List the opportunities to learn new competencies and/or to strengthen existing competencies through employer sponsored learning._____

_____

_____

R. What are the most attractive features of this job for you?_____

_____

_____

S. Are you interested in this job as a possible occupation? Why?_____

_____

_____

T. What strengths do you have that would be valuable for doing this job well? _____

_____

U. Describe your plans of action for obtaining either this job or deciding which other job you will pursue?_____ _____

_____

_____

SAMPLE STUDENT SELF ASSESSMENT

This form can be used in the core skills and/or specialization/application phases. It will help students monitor their own learning, as well as provide the Teacher/Coordinator relevant information.

STUDENT'S NAME_____ DATE_____

EMPLOYEE/INSTRUCTOR_____ DEPT._____

1. What did you learn in _____?

2. List the tools, equipment and/or any reading material used.

3. What knowledge did you utilize? (theories, concepts, facts,etc.)

4. What knowledge and/or skills did you improve? How did you improve them?

5. Did you solve any problems, do any research and/or learn anything new and unexpected?

6. How would you assess the quality of your efforts?

   outstanding   very good   acceptable   needs improvement

7. List any ways you might improve your learning.

SAMPLE STUDENT BEHAVIOR ASSESSMENT

This form can be used by Employee Instructors to gather data regarding each student's interpersonal competencies.

STUDENT'S NAME:_____ DATE:_____

DIRECTIONS: Circle appropriate number to indicate your personal evaluation of the student's behavior as observed by you during the training period indicated above. Evaluate only those interpersonal competencies for which you have sufficient experience or evidence upon which to base an evaluation.

*RATING SCALE: 4. Exceptional/Always
                     3. Usually Successful
                     2. About 50-50
                     1. Seldom/Avoids

4 3 2 1   CONFIDENCE - Believes in self; respected by others, and emulated

4 3 2 1   PERSEVERANCE - Continues difficult tasks until completed

4 3 2 1   COMPREHENSION - Pays attention and "catches on" to ideas/situations

4 3 2 1   INITIATIVE - Initiates tasks without being told; is self-motivated; is first one to begin task assigned

4 3 2 1   RELIABILITY - Does tasks assigned without constant supervision

4 3 2 1   TACT - Is careful not to hurt other's feelings or cause ? anger

4 3 2 1   LOYALTY - Stands up for personal values and fully supports supervisors

4 3 2 1   ENTHUSIASM - Demonstrates desire to learn and please; eager, earnest, and zealous worker

4 3 2 1   COOPERATION - Demonstrates willingness to learn as a team member and assist others

4 3 2 1   ADAPTABILITY - Adjusts to changes in schedules, job assignments, and supervisors

4 3 2 1   SAFETY CONSCIOUS - Observes safety rules and regulations

4 3 2 1   HOUSEKEEPING - Maintains tools, equipment and learning stations

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4 3 2 1   ORAL EXPRESSION - States information in a clear, logical order

4 3 2 1   SOCIABLE - Makes friends easily and is open-minded

4 3 2 1   GROOMING - Dresses appropriately for variety of occasions

4 3 2 1   LEADERSHIP - Gets others to cooperate and channel their efforts towards a common goal

4 3 2 1   POISE - Maintains self-control

SKILL RELATED COMPETENCIES

4 3 2 1   Shows exceptional skills in this area

4 3 2 1   Follows plans and directions well

4 3 2 1   Is responsible for materials and equipment

4 3 2 1   Comes to class with required materials

4 3 ? ?   Is a careful and diligent worker

4 3 2 1   Contributes and participates in classroom work assignment

4 3 2 1   Prepares and performs daily work well

4 3 2 1   Has the ability and makes an effort

4 3 2 1   Cooperative in classroom/work situation

4 3 2 1   Comes to class daily

4 3 2 1   Is prompt

*These evaluations were made from personal observations during the student's training and may vary from one individual to another. No effort was made to measure these affective competencies quantitatively.

EVALUATOR'S SIGNATURE:_____ DATE:_____

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SAMPLE STUDENT RATINGS

NAME:_____   SCHOOL:_____
GRADE:_____   DATE:_____

DIRECTIONS TO THE STUDENT: Please respond to each of the
following statements indicating how applicable the statement
is considering your own behavior. Please answer each item by   APPLIES TO ME:
circling your first response. DO NOT study each item at
length; your first response will be more than satisfactory.
All data will be kept strictly confidential; only group data
will be used in project reports. Your most direct and honest
responses will be appreciated. THANK YOU!

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
1. I am level headed.	1	2	3	4	5
2. I know how to get information about things I want to know about.	1	2	3	4	5
3. I need prodding to get things done.	1	2	3	4	5
4. I manage my own time wisely.	1	2	3	4	5
5. I feel at ease with adults I do not know.	1	2	3	4	5
6. I talk to friends and parents about future goals.	1	2	3	4	5
7. I believe everything my friends tell me.	1	2	3	4	5
8. I set deadlines for completing tasks.	1	2	3	4	5
9. I prepare ahead of time.	1	2	3	4	5
10. I am able to talk with adults who I don't know very well.	1	2	3	4	5
11. I work on overcoming my own weaknesses.	1	2	3	4	5
12. I am afraid to try new things.	1	2	3	4	5
13. I accept responsibility.	1	2	3	4	5
14. I am organized.	1	2	3	4	5
15. Adults seem to enjoy my company.	1	2	3	4	5
16. I draw conclusions based on information from several sources.	1	2	3	4	5
17. I am able to apply what I learned from one situation to another.	1	2	3	4	5
18. I learn from my mistakes.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
19. I have specific plans for the next two years.	1	2	3	4	5
20. I respond appropriately to requests made by adults.	1	2	3	4	5
21. I give up things to reach my goals.	1	2	3	4	5
22. I try to learn from other people.	1	2	3	4	5
23. I make excuses for my errors.	1	2	3	4	5
24. I know how to use my talents to my advantage.	1	2	3	4	5
25. I think adults praise me for my friendliness.	1	2	3	4	5
26. I set reachable goals.	1	2	3	4	5
27. I look at all sides of an issue.	1	2	3	4	5
28. I accept honest criticism and use it positively.	1	2	3	4	5
29. I think about good and bad results before taking action.	1	2	3	4	5
30. I am open-minded.	1	2	3	4	5
31. I initiate, as well as respond, when relating with adults.	1	2	3	4	5
32. I tend to just get by.	1	2	3	4	5
33. I search out answers to questions.	1	2	3	4	5
34. I can honestly share my opinions and thoughts with friends.	1	2	3	4	5
35. I am easily influenced by others.	1	2	3	4	5
36. I do things independently.	1	2	3	4	5
37. I know when a job or task should have been done better.	1	2	3	4	5
38. I can honestly share my opinions and thoughts with my family.	1	2	3	4	5
39. I rely on others to make decisions for me.	1	2	3	4	5
40. I put things off until the last minute.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
41. I can honestly share my opinions and thoughts with teachers and adults.	1	2	3	4	5
42. I am confident in my <u>abilities</u>.	1	2	3	4	5
43. I complete tasks.	1	2	3	4	5
44. I can make realistic career choices and decisions.	1	2	3	4	5
45. I can select courses appropriate to my educational goals, interest, and abilities.	1	2	3	4	5
46. I am a self-starter.	1	2	3	4	5
47. Adults make me nervous.	1	2	3	4	5
48. I know how the things that are important to me affect my career choice.	1	2	3	4	5
49. I keep my word.	1	2	3	4	5
50. I know the limits of my strengths and weaknesses.	1	2	3	4	5
51. I feel that others control my activities.	1	2	3	4	5
52. I consider adults I know my friends.	1	2	3	4	5
53. I understand how my abilities, interests, and values will affect my life-style.	1	2	3	4	5
54. I can figure out how to get where I want to be.	1	2	3	4	5
55. I use things other than my own talents to complete tasks.	1	2	3	4	5
56. I feel that I am in control of where I end up.	1	2	3	4	5
57. I trust my decisions.	1	2	3	4	5
58. I enjoy learning new things.	1	2	3	4	5
59. I am aware of the educational alternatives in my high interest areas.	1	2	3	4	5
60. I know how to improve myself.	1	2	3	4	5

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
61. I take advice from adults as well as my friends.	1	2	3	4	5
62. I understand why I am required to behave a certain way in the community and society.	1	2	3	4	5
63. I can be creative in finding solutions to problems.	1	2	3	4	5
64. I am aware of career training opportunites offered in my high interest areas.	1	2	3	4	5
65. I have a high degree of self-confidence.	1	2	3	4	5
66. I enjoy and appreciate people who think differently than I do.	1	2	3	4	5

This survey is regarding student: _____

SCHOOL: _____   DATE: _____

DIRECTIONS TO THE TEACHER: Please respond to each of the
following statements indicating how applicable the state-
ment is considering this student's behavior. Please answer
each item by circling your first response. DO NOT study
each item at length; your first response will be more than
satisfactory. All data will be kept strictly confidential;
only group data will be used in project reports. Your most
direct and honest responses will be appreciated. THANK YOU.

APPLIES TO STUDENT

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
1. This student is level headed.	1	2	3	4	5
2. This student knows how to get information about subject matter in question.	1	2	3	4	5
3. This student needs prodding to get things done.	1	2	3	4	5
4. This student manages time wisely.	1	2	3	4	5
5. This student feels at ease with adults who are strangers.	1	2	3	4	5
6. This student talks to friends and parents about future goals.	1	2	3	4	5
7. This student believes everything friends say.	1	2	3	4	5
8. This student sets deadlines for completing tasks.	1	2	3	4	5
9. This student prepares ahead of time.	1	2	3	4	5
10. This student is able to talk with adults who are new acquaintances.	1	2	3	4	5
11. This student works on overcoming weaknesses.	1	2	3	4	5
12. This student is afraid to try new things.	1	2	3	4	5
13. This student accepts responsibility.	1	2	3	4	5
14. This student is organized.	1	2	3	4	5
15. Adults seem to enjoy this student's company.	1	2	3	4	5
16. This student draws conclusions based on information from several sources.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
17. This student is able to apply what is learned from one situation to another.	1	2	3	4	5
18. This student learns from personal mistakes.	1	2	3	4	5
19. This student has specific plans for the next two years.	1	2	3	4	5
20. This student responds appropriately to requests made by adults.	1	2	3	4	5
21. This student gives up things to reach goals.	1	2	3	4	5
22. This student tries to learn from other people.	1	2	3	4	5
23. This student makes excuses for personal errors.	1	2	3	4	5
24. This student knows how to use personal talents to the best advantage.	1	2	3	4	5
25. This student thinks adult praise is given for personal friendliness.	1	2	3	4	5
26. This student sets reachable goals.	1	2	3	4	5
27. This student looks for all sides to an issue.	1	2	3	4	5
28. This student accepts honest criticism and uses it positively.	1	2	3	4	5
29. This student thinks about good and bad results before taking action.	1	2	3	4	5
30. This student is open-minded.	1	2	3	4	5
31. This students initiates, as well as responds, when relating with adults.	1	2	3	4	5
32. This student tends to just get by.	1	2	3	4	5
33. This student searches out answers to questions.	1	2	3	4	5
34. This student can honestly share personal opinions and and thoughts with friends.	1	2	3	4	5
35. This student is easily influenced by others.	1	2	3	4	5

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
36. This student does things independently.	1	2	3	4	5
37. This student knows when a job or task should have been done better.	1	2	3	4	5
38. This student can honestly share opinions and thoughts with family members.	1	2	3	4	5
39. This student relies on others for decisions.	1	2	3	4	5
40. This student puts things off until the last minute.	1	2	3	4	5
41. This student can honestly share opinions and thoughts with teachers and adults.	1	2	3	4	5
42. This student is confident of personal abilities.	1	2	3	4	5
43. This student completes tasks.	1	2	3	4	5
44. This student can make realistic career choices and decisions.	1	2	3	4	5
45. This student can select courses appropriate to personal educational goals, interests, and abilities.	1	2	3	4	5
46. This student is a self-starter.	1	2	3	4	5
47. Adults make this student nervous.	1	2	3	4	5
48. This student knows how the things that are important affect career choices.	1	2	3	4	5
49. This student follows through with commitments.	1	2	3	4	5
50. This student knows the limits of personal strengths and weaknesses.	1	2	3	4	5
51. This student does not feel in control of personal activities.	1	2	3	4	5
52. This student considers adults as personal friends.	1	2	3	4	5
53. This student understands how individual abilities, interests and values will affect individual life-styles.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
54. This student can figure out how to reach desired goals.	1	2	3	4	5
55. This student uses things other than personal talents to complete tasks.	1	2	3	4	5
56. This student feels in control of personal destiny.	1	2	3	4	5
57. This student trusts personal decisions.	1	2	3	4	5
58. This student enjoys learning new things.	1	2	3	4	5
59. This student is aware of the educational alternatives in high interest areas.	1	2	3	4	5
60. This student knows how to accomplish self-improvement.	1	2	3	4	5
61. This student takes advice from adults as well as friends.	1	2	3	4	5
62. This student understands what is required to behave a certain way in the community and society.	1	2	3	4	5
63. This student can be creative in finding solutions to problems.	1	2	3	4	5
64. This student is aware of career training opportunities offered in high interest areas.	1	2	3	4	5
65. This student has a high degree of self-confidence.	1	2	3	4	5
66. This student enjoys and appreciates people who think differently.	1	2	3	4	5

SAMPLE PARENT RATINGS

This Survey is regarding your son/daughter:_____

SCHOOL:_____ DATE:_____

DIRECTIONS TO THE PARENT: Please respond to each of the
following statements indicating how applicable the statement
is considering your son's or daughter's behavior. Please
answer each item by circling your first response. DO NOT
study each item at length; your first response will be more
than satisfactory. All data will be kept strictly confidential;
only group data will be used in project reports. Your most
direct and honest responses will be appreciated. THANK YOU.

APPLIES TO SON/DAUGHTER

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
1. My son/daughter is level headed.	1	2	3	4	5
2. My son/daughter knows how to get information about subject matter in question.	1	2	3	4	5
3. My son/daughter needs prodding to get things done.	1	2	3	4	5
4. My son/daughter manages time wisely.	1	2	3	4	5
5. My son/daughter feels at ease with adults who are strangers.	1	2	3	4	5
6. My son/daughter talks to friends and parents about future goals.	1	2	3	4	5
7. My son/daughter believes everything friends say.	1	2	3	4	5
8. My son/daughter sets deadlines for completing tasks.	1	2	3	4	5
9. My son/daughter prepares ahead of time.	1	2	3	4	5
10. My son/daughter is able to talk with adults who are new acquaintances.	1	2	3	4	5
11. My son/daughter works on overcoming own weaknesses.	1	2	3	4	5
12. My son/daughter is afraid to try new things.	1	2	3	4	5
13. My son/daughter accepts responsibility.	1	2	3	4	5
14. My son/daughter is organized.	1	2	3	4	5
15. Adults seem to enjoy my son's/daughter's company.	1	2	3	4	5
16. My son/daughter draws conclusions based on information from several sources.	1	2	3	4	5
17. My son/daughter is able to apply what is learned from one situation to another.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
18. My son/daughter learns from personal mistakes.	1	2	3	4	5
19. My son/daughter has specific plans for the next two years.	1	2	3	4	5
20. My son/daughter responds appropriately to requests made by adults.	1	2	3	4	5
21. My son/daughter gives up things to reach goals.	1	2	3	4	5
22. My son/daughter tries to learn from other people.	1	2	3	4	5
23. My son/daughter makes excuses for personal errors.	1	2	3	4	5
24. My son/daughter knows how to use personal talents to the best advantage.	1	2	3	4	5
25. My son/daughter thinks adult praise is given for personal friendliness.	1	2	3	4	5
26. My son/daughter sets reachable goals.	1	2	3	4	5
27. My son/daughter looks for all sides to an issue.	1	2	3	4	5
28. My son/daughter accepts honest criticism and uses it positively.	1	2	3	4	5
29. My son/daughter thinks about good and bad results before taking action.	1	2	3	4	5
30. My son/daughter is open-minded.	1	2	3	4	5
31. My son/daughter initiates, as well as responds, when relating with adults.	1	2	3	4	5
32. My son/daughter tends to just get by.	1	2	3	4	5
33. My son/daughter searches out answers to questions.	1	2	3	4	5
34. My son/daughter can honestly share personal opinions and thoughts with friends.	1	2	3	4	5
35. My son/daughter is easily influenced by others.	1	2	3	4	5
36. My son/daughter does things independently.	1	2	3	4	5

	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
37. My son/daughter knows when a job or task should have been done better.	1	2	3	4	5
38. My son/daughter can honestly share opinions and thoughts with family members.	1	2	3	4	5
39. My son/daughter puts things off until the last minute.	1	2	3	4	5
40. My son/daughter can honestly share opinions and thoughts with teachers and adults.	1	2	3	4	5
41. My son/daughter is confident of personal abilities.	1	2	3	4	5
42. My son/daughter completes tasks.	1	2	3	4	5
43. My son/daughter can make realistic career choices and decisions.	1	2	3	4	5
44. My son/daughter can select courses appropriate to personal educational goals, interests, and abilities.	1	2	3	4	5
45. My son/daughter is a self-starter.	1	2	3	4	5
46. Adults make my son/daughter nervous.	1	2	3	4	5
47. My son/daughter knows how the things that are important affect career choices.	1	2	3	4	5
48. My son/daughter follows through with commitments.	1	2	3	4	5
49. My/son daughter knows the limits of personal strengths and weaknesses.	1	2	3	4	5
50. My son/daughter feels in control of personal activities.	1	2	3	4	5
51. My son/daughter considers adults as personal friends.	1	2	3	4	5
52. My son/daughter understands how individual abilities, interests, and values will affect life-styles.	1	2	3	4	5
53. My son/daughter can figure out how to reach desired goals.	1	2	3	4	5
54. My son/daughter uses things other than personal talents to complete tasks.	1	2	3	4	5

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	Never	Little of the Time	Some of the Time	Most of the Time	All of the Time
55. My son/daughter feels in control of where personal destiny.	1	2	3	4	5
56. My son/daughter trusts personal decisions.	1	2	3	4	5
57. My son/daughter enjoys learning new things.	1	2	3	4	5
58. My son/daughter is aware of the educational alternatives in high interest areas.	1	2	3	4	5
59. My son/daughter knows how to accomplish self-improvement.	1	2	3	4	5
60. My son/daughter takes advice from adults as well as friends.	1	2	3	4	5
61. My son/daughter understands what is required to behave a certain way in the community and society.	1	2	3	4	5
62. My son/daughter can be creative in finding solutions to problems.	1	2	3	4	5
63. My son/daughter is aware of career training opportunities offered in high interest areas.	1	2	3	4	5
64. My son/daughter has a high degree of self-confidence.	1	2	3	4	5
65. My son/daughter enjoys and appreciates people who think differently.	1	2	3	4	5

Drafting

- Layout and draw electrical schematics.
- Use correct graphic and dimensioning principles.
- Demonstrates skills of neatness, accuracy and speed.
- Use correct drafting and technical vocabulary.
- Explain the steps and processes of making blueprint masters for both paper and plastics vellum.
- Describe the application of X-Y coordinates as used in CNC machines.
- Explain and apply the quality standards of electrical schematics and circuity design.

Machine Shop

- Use process sheets for making paper tapes.
- Read mechanical blueprints.
- Explain and apply the speed/feed principle in relationship to the CNC machines.
- Apply computer programming principles as related to CNC operations.
- Explain and operate basic CNC machine functions.

Production

- Read electrical schematics.
- Identify electrical components and circuity.
- Explain and use assembly drawings.
- Assemble components correctly.
- Apply correct assembly procedures including handling of parts and use of tools/equipment.
- Solder and desolder components and/or wires according to industry standards.
- Inspect P/C boards for shorts, breaks, correct component placement and other defects.
- Follow instructions for mechanical assembly and wiring.

Testing/Quality Control

- Use correct technical vocabulary.
- Properly use test equipment: VOM's, DVM's, oscilloscopes, logic analyzers to test circuity.
- Apply proper calibrating and maintenance procedures for test equipment.
- Use data manuals as resources and a testing aid.
- Demonstrate proper care and handling techniques applicable to P/C boards and respective components.
- Apply concepts of high true logic, low true logic, and Boolean logic in testing circuits and integrated computer systems.
- Visually examine P/C boards for defects and/or component placement that may cause malfunctions.
- Interpret data from tests to diagnose problems and/or to certify correct functioning of circuits and/or electrical systems.

Systems

- Explain how software can modify and/or control hardware for variable functions.
- Use software to monitor and/or control some systems.
- Explain CAMAC systems and describe the different components.
- Define and differentiate software languages used for systems integration.

Engineering

- Use data manuals and electrical engineering reference materials.
- Solve simple design problems that electrical engineers encounter.
- Explain and apply design standards used by electrical engineers.
- Flow chart engineering related problems and/or projects.

PWS

- Explain the process of manufacturing P/C boards.
- Inspect P/C boards for defects.
- Describe the quality standards for P/C boards.
- Explain how the programs for the CNC automatic drilling machines are developed.

Data Processing

- Explain essential data entry and data processing concepts.
- Use RPG coding forms, spacing charts, etc.; to enter data, run and deliver a simple RPG program.
- Can compare and contrast RPG with the BASIC language used in personal home computers programming.
- Use programming manuals and documentation for preparing, running and/or debugging simple programs.
- Explain the purpose and operations of a data department in a manufacturing company.

Graphic Arts

- Explain and apply principles of printed graphic presentations.
- Lay out and paste up a brochure.
- Use duplication and reprographic equipment.
- Explain the role and responsibilities of graphic arts in a business setting.
- Use correct vocabulary for concepts, as well as the materials and equipment used.

Introduction and Rationale

More than a dozen computers have touched your life since you got up this morning. Computers are used by schools to schedule classes and keep your records. Banks use them to process checks and to keep credit card accounts. Police, government, and the airline industry are making more and more use of computer technology. The sky is being scanned to predict tomorrow's weather and to protect us from potential enemies. Airplanes, cars, and televisions are being equipped with computer controllers. From 1964 to 1984, the number of computers has grown from twenty thousand to over twenty million. Computers are becoming smaller, faster, more powerful, and more reliable. Advances are being made so fast that the life of some computer products is reduced to less than one year by a new invention which is faster, smaller, more powerful and/or more reliable. If the automotive industry grew as fast as the computer industry, the most expensive car would cost three dollars. The car would get three million miles per gallon of gas. It would have enough power to drive the largest battleship and would only need repairs every one hundred years. As impractical as it seems, six of these cars could be placed on the head of a pin.

There is no doubt that all of you will be computer users in your lifetime. It is necessary to educate people about the use of computers. This is being done at all levels of education.

Computers are electronic machines. The potential uses and the potential of computers themselves are beyond estimation. Yet, a computer is still a machine which is dependent upon people. Someone has to design them. Someone has to program them. Someone has to use them. What good is a computer if it cannot be used by someone? What good is a computer that does not work? Who designs computers? Who fixes them? How do people obtain the knowledge and skills they need to design, build and fix computers when things are changing so quickly? How can schools prepare students to work on equipment they do not have? This course was developed to help students prepare for future occupations in electronics and computers.

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THE COMPUTER INDUSTRY TECHNOLOGY (CIT) COURSE

The Computer Industry Technology course is offered as an elective two-semester course for Lockport Township High School students. This unique course is operated under a joint agreement between Lockport Township High School and KineticSystems Corporation of Lockport. This class is an extension of the instructional program provided by District 205.

The CIT course is the first course in Illinois and perhaps the nation to help high school students prepare for their future by attending class within the facilities of a microcomputer manufacturing industry, learning a blend of academics and job related competencies. Students in the CIT course have a special opportunity that very few other students have. Students must always remember they are guests. It is imperative to keep in mind that time is money for any business, and that KineticSystems personnel are donating their time to help students learn. Therefore, all students are expected to be motivated to ask questions and to complete all assignments on time.

The Computer Industry Technology course blends academics and job related competencies. In addition to the instruction from their teacher, students are able to learn from experts in electronics and computers who use the latest technology on the market. As a result, students observe demonstrations and acquire an understanding of ultra modern, sophisticated, and expensive equipment that is not possible in most high schools. Students hear presentations and receive instruction from a variety of people including engineers, technicians, and computer programmers. Access to these kinds of people and technological resources enable students to be prepared with the knowledge and skills they will need in many occupations related to computers and electronics. Students are able to test their book learning and clarify their career goals based upon firsthand knowledge for job requirements and actual job duties. As a result, students are able to make sound decisions about additional education or training they might need to pursue the career of their choice.

CIT COURSE OBJECTIVES

Objective 1. Students will acquire a working knowledge about how computers function, which includes the inter-relationship of hardware and software.

2. Students will acquire firsthand knowledge of the progressive phases of computer design and manufacturing.

3. Students will know the different job duties/tasks as well as the educational and training qualifications for a spectrum of occupations associated with computers and electronics.

4. Students will acquire firsthand working knowledge and skills needed to design, layout, build, test, and maintain computers and computer systems.

5. Students will know how the principles and applications of computer interfacing for monitoring and controlling other systems.

6. Students will be able to explain the present and potential impact of computers on their lives and future careers of their choice.

Textbook:

Due to rapid advancement and changing technology, one textbook will not completely cover the total computer field. Therefore, a general text has been selected to give the student a strong basic background.

Course Text:

The Intelligent Microcomputer by Roy W. Goody.

Optional Reference Text:

To deal with the large and new language of the industrial computer systems, it is suggested that the students obtain a copy of Microcomputer Dictionary by Charles J. Sippl, available from Radio Shack Catalog Number 62-2311 for $7.95.

Handouts and Reference Materials

Since the field of computers and electronics is changing so fast, many handouts will be provided.

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Student Guidelines

In order for students to gain the most from their unique learning opportunity, they must be attentive, self-motivated, and disciplined to ask questions. By having access to experts in many fields, students have an unlimited opportunity to learn from these resource people. The extent to which students take advantage of these opportunites depends upon their initiative and willingness to ask questions.

The CIT class will require students to do regular homework. Most students will need to study the new vocabulary and new concepts which will be introduced. The nature of the course is similar to learning a foreign language. What is covered in the latter part of the course depends upon what is learned during the first part. Each day adds new knowledge to the next, all of which is equally important.

Taking good notes is a proven method for improving learning. Writing notes not only enhances listening, it reinforces what is being said. Just listening is not a very effective way of learning. However, listening followed by taking notes is a way of providing instant playback. The written notes provide an opportunity to review and re-learn what was originally said.

Attendance as well as attentiveness is important for students and it is important for good employees. People in business and industry know that time equals money. People who are late for work and people who miss work are not paid for the time missed. Likewise, student attendance and attentivenss is stressed and it is evaluated. Many of the learning opportunities cannot be made up if a student misses them. This is true when a demonstration, presentation or learning experience is conducted by an employee of KineticSystems. It is imperative that the students make every effort to utilize the learning opportunity available, which means being on-task and on-time.

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GRADING PROCEDURES

(1) Scores on written tests which include periodic short tests (quizzes), quarterly and semester exams will be cumulative.

(2) Homework and in-class assignments will be evaluated in terms of accuracy, completeness, and promptness. Each day an assignment is late will reduce the grade by one letter.

(3) Incomplete assignments due to short term excused absences must be completed within ten days or become an automatic failure. Students are responsible for obtaining the information missed.

(4) Any student who copies and/or cheats on any assignment, test or examination will receive a failing grade for that particular situation.

(5) A students learning performance will be periodically rated by KSC resource people. Time on tasks and the degree of proficiency will be rated.

(6) Student notebooks will be graded at least once each quarter.

CIT CLASS RULES

1. **Complete all assignments correctly and on time.**

    It is easy to slack off in the beginning of class, but the beginning is the worst time to slack off. If you ever get behind, it may be impossible to catch up.

2. **Study every day.**

    Your learning is cumulative. What you learn today will help you tomorrow. If you are having trouble, it might be the result of falling behind the day before. You cannot miss school and keep up. In some classes, it may be possible to do poorly on one part of the class without serious problems later. It is not so with this course.

3. **Always dress and groom as if you were going for a job interview.**

    Your personal appearance tells a lot about who you are and what is important to you. Neat and clean clothes reflect your habits.

4. **Learn the correct names of all the resource people.**

    Everyone likes being called by his correct name.

5. **Speak to people courteously!**

    "Yes, sir!", "Yes, ma'am!", "Thank you very much!", "Excuse me, I have a question!". Address people appropriately as Mr., Mrs., or Ms.

6. **Respect all of your fellow students and KSC employees.**

    Interfering with other people will not be tolerated. Putting down others will not be tolerated.

7. **Listen very carefully and ask questions.**

    Listening and asking questions is very important. Do not be afraid to ask questions. Your resource people like to answer questions that are important to you. You have a unique opportunity to learn from experts in the field of electronics and computers. The more you ask questions and the better you listen, the more you will learn. The choice is yours.

8. **Be willing to help out a fellow student if they are having trouble understanding a concept.**

    Often times one student can explain something to another student easier than adults can.

9. <u>Follow</u> <u>the</u> <u>rules.</u>

    You are to follow the rules that apply to you in school as well as the rules that apply to the various departments of KineticSystems. If there is a conflict of rules, the <u>strictest</u> rule applies. You are responsible to know what is required of you regardless of what other people may be doing. If you ever have any doubt whether some behavior is 100% correct, do <u>not</u> do it.

10. <u>Come</u> <u>prepared</u> <u>everyday.</u>

    Always bring your notebooks and completed assignments. If you missed a day of school, obtain the assignment from a friend or from the instructor. There is no excuse for failing to complete assignments.

UTENSILS IN FOOD SERVICE

LEARNING PACKET

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UTENSILS IN FOOD SERVICE

LEARNING PACKET

Student Objectives:

1. The student will be able to name the various types of utensils and tools intrinsic to food preparation and tell the kinds of tasks each tool is used for, how to clean and store the utensils and tools. This objective will be evaluated on a written exam and activity sheets.

2. The student will be able to demonstrate, at the learning sites, the proper use, care, and safety procedures of the various utensils found in the professional kitchen. This objective will be evaluated by the instructor at the work stations.

3. The student will be able to describe the various types of pots and pans used in professional cooking and give guidelines for the appropriate use of each. A written exam, activity sheets, and observation by the instructor at the learning site will be used to evaluate this objective.

4. Given a list of tasks, the student will be able to choose the correct cutlery tool for the task.

5. The student will be able to show entry level skills in paring, chopping, slicing, dicing and cutting julliene strips using the correct equipment. The student will demonstrate these skills at the learning site work stations.

6. Given a picture or the actual knife, the student will be able to identify it on site.

7. The student will be able to explain the safety rules for handling knives on a written or oral exam.

8. Given a picture of a knife, the student will be able to label the parts of the knife.

9. The student will be observed by the instructor in the work station to determine if proper tools are being used for the assigned tasks.

LEARNING PACKET

Learning Activities:

The starred activities must be done by the student. A student may choose which unstarred items he wants to do.

1. Pre-Test. See the instructor.

2. Using the Food Service Worktext, read the following pages:

    50-51 "Types of Knives"
    53-54 "Sharpening a Knife"
    58-59 "Hand Tools"
    62-63 "Baking Tools"
    71-73 "Pots and Pans"

3. Using the textbook Exploring Professional Cooking, read pp. 94-109.

4. Using the textbook Professional Cooking and Baking, read pp. 31-46.

5. Read the handout 10-10, 10-11 and 10-12.

*6. Read the handout on "Scoop Size and Approximate Yields".

*7. Do the following Activity Sheets and hand in to be graded:

    Activity One - Numbered Parts
    Activity Two - Locked Knives
    Activity Three - Keep It Sharp
    Activity Four - Scrambled, Not Fried
    Activity Five - Who to Choose
    Activity Six - Quick Crossword

*8. Define the following terms as they relate to cutting procedures and tools: slice, dice, shred, julienne, mince, chop, bone, French knife, serrated, cleaver, paring knife, citrus knife, peeler, corer/cutter, grater, kitchen shears.

*9. Define the following terms as they relate to mixing procedures: blend, stir, beat, whip, meringue, fold, dissolve, cut in.

*10. Ask the instructor for the Utensils in Food Service Test, complete and return to the instructor.

The following will help you determine if you already have the ability identified in the performance objectives for this learning packet.

In the blanks at the end of each description below, write the name of the tool that fits that description. When the blanks are all filled in, the letters in the squares, reading down, will spell something that pertains to all of these terms.

1. Used to remove the fat from soup.

2. The end of the knife—it can be rounded or pointed.
— □ — — — — — —

3. Kind of knife used to section grapefruit.
— □ —

4. Tools used to remove the centers from apples.
— — □ — — — —

5. Tools for beating or mixing batters; also an attachment to a mixer.
□ — — — — —

6. Use a large one to serve soup; a small one to serve gravy.
— □ — — — —

7. It can cut, chop, or slice.
— — — — □

8. A rod used to remove burrs from a sharpened knife.
— □ — — —

9. For serving controlled portions of food, such as ice cream.
— □ — — — —

10. Used to sharpen a knife; it comes in varying degrees of coarseness.
— — — □ —

11. Also called a palette knife, used for spreading frostings.
— — □ — —

12. Used to remove lumps and other particles from flour.
— — — — — □ —

□ — — — — — —

You have to perform the eleven tasks listed below and you must use one of these tools each time. Write the name of the tool you would use in the space provided. Remember, all of the tools must be used, but each can only be used *once*.

Colander	Skimmer	Ladle	China Cap
Strainer	Basting Spoon	Ice Cream Scoop	Two-tine Fork
Slotted Spoon	Tongs	Off-set Spatula	

1. To serve vegetables that have been cooked in liquid _____

2. To baste a chicken _____

3. To purée cooked peas _____

4. To strain gravy _____

5. To serve gravy _____

6. To serve individual portions of mashed potatoes _____

7. To remove the fat from soup _____

8. To drain blueberries _____

9. To lift chicken cooked in a thick sauce _____

10. To turn a hamburger on a grill _____

11. To hold a roast beef as it is being carved _____

If you feel you were able to answer most of these questions correctly, see the instructor. If not, place your paper on the desk and proceed to the activities.

ANSWER KEY - UTENSILS IN FOOD SERVICE PRETEST

1.   Skimmer
2.   Tip
3.   Citrus
4.   Corers
5.   Whips
6. Ladle
7.   Knife
8.   Steel
9.   Scoop
10.   Stone
11. Spatula
12.   Sifter

1. slotted spoon
2. basting spoon
3. china cup
4. strainer
5. ladle
6. ice cream scoop
7. skimmer
8. colander
9. tongs
10. off-set spatula
11. two-tine fork

SCOOP SIZE AND APPROXIMATE YIELDS

Size	Use	Cups
No. 6	Main dish salads	3/4 cup
No. 8	Meat patties, casseroles	1/2 cup
No. 10	Meat patties, cereals	3/8 cup.
No. 12	Salad, vegetables, croquettes	1/3 cup
No. 16	Muffins, desserts	1/4 cup
No. 20	Sandwich fillings, desserts	3 1/5 T.
No. 24	Sandwich fillings, muffins	
No. 30	Large drop cookies	1/8 cup.
No. 40	Medium drop cookies	1 3/4 T.
No. 60	Small drop cookies	1/16 cup

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Notes

Which tools and
utensils do you
use in your in-
stitution?

Tools and Utensils

In order to properly prepare food, you must use the
correct tools and utensils. Pictured below are some of
the more common tools and utensils that should be found
in a food service facility.

SCOOPS -- come in various sizes and are used to portion
food before it is cooked (salisbur
steak) and for serving when pre-
pared (mashed potatoes, dressing,
etc.)
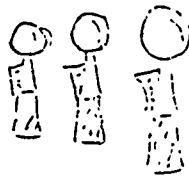
FRENCH KNIFE -- used for
chopping.

COOK'S KNIFE -- used for slicing meat. (There are knive
for slicing bread, boning meat,
etc.)

PARING KNIFE -- used for
peeling fruits and vegetables.

WIRE WHIPS -- used for whipping or beating items to in-
corporate air. For example: eggs,
milk and whipped cream.

COLANDERS -- used to drain macaroni,
spaghetti, potatoes, etc. Also, they
may be used to drain washed lettuce
and other greens.

MEASURING DEVICES -- such as graduated cup containers an
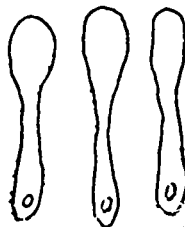quart containers are used to measu
wet and dry ingredients.

MEASURING SPOONS -- range in size from 1/4 teaspoon to 1 tablespoon.

SIFTER -- used to sift flour and sugar.

SCALE -- for measuring portions. Scales may be gram calibrated or in ounces and pounds.

SPOONS -- may be slotted, holed or solid. Each spoon has a specific use.

LADDLES -- are used for portioning out liquid foods such as soup and gravy.

DOUBLE BOILERS -- are used for scalding milk and making puddings and sauces.

TONGS -- are used for picking up items such as bread, lemon slices. etc.

SPATULAS -- Square ended ones are used to turn food on a grill, lift food from pan; rounded ones are used to spread--for example, mayonnaise on bread for sandwiches.
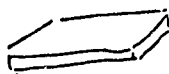
FORKS -- used for testing doneness of items and for turning large pieces of meat over.
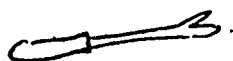
MEAT THERMOMETER -- used to determine internal doneness of meat and poultry.
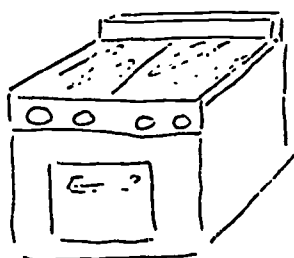
Notes

CUTTING BOARDS -- are used to chop greens, etc. for salads. Also used to cut chicken and other meat or fish.

Large Equipment

Large equipment is essential to a foodservice facility. The amount of large equipment in a facility will depend on the size of the facility (i.e. the number of meals to be served) and the complexity of the menu.

STOVES -- may have a flat surface for cooking or a grill or griddle top. The bottom part of the stove can be used for baking and roasting. Ovens heat the product from both above and below.

BROILERS -- are used for cooking tender cuts of meat, fish and poultry. Broilers only produce heat from the top.
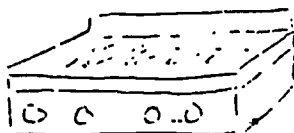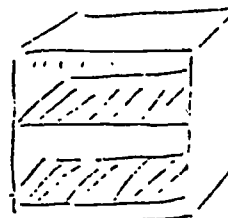
GRILLS -- are used for cooking tender cuts of meat, sandwiches, pancakes, eggs, etc.

DEEP FAT FRYERS -- are used for deep frying of such things as chicken, hushpuppies, corn fritters, etc.
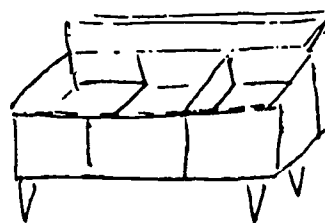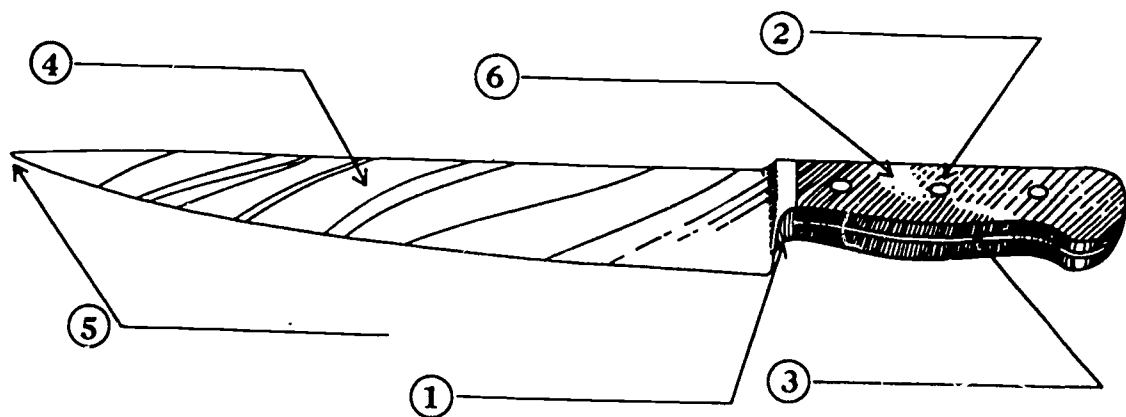
Activity One — Numbered Parts

See how many parts of the knife you can remember. Use this drawing to answer the questions below.

a. Part 1 in the picture is called _____

b. Part 2 in the picture is called _____

c. Part 3 in the picture is called _____

d. Part 4 in the picture is called _____

e. Part 5 in the picture is called _____

f. Part 6 in the picture is called _____

Activity Two — Locked Knives

Each of the words listed here is a kind of knife or a part of a knife.
Use these terms to fill in the blanks in this puzzle. Each term can
only be used once. Vegetable peeler has already been filled in.

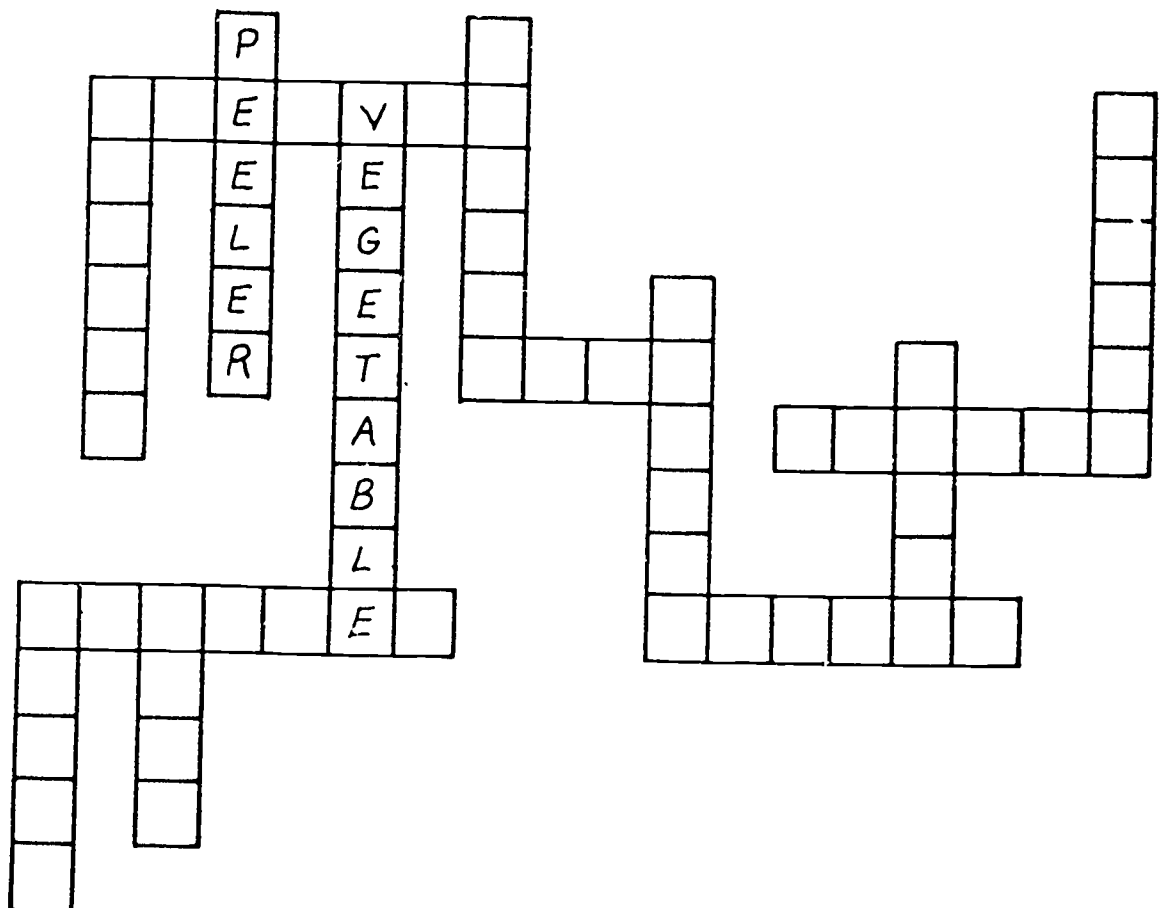|		
TANG	RIVETS	SLICER
HEEL	BONING (KNIFE)	CLEAVER
BLADE	PARING (KNIFE)	BUTCHER (KNIFE)
FRUIT (KNIFE)	FRENCH (KNIFE)	VEGETABLE PEELER
	CITRUS (KNIFE)	

Activity Three — Keep It Sharp

Listed below are the steps that you would take to sharpen a knife. Number the steps in the order in which they should be performed.

_____ Wipe with a clean towel.

_____ Draw against a coarse stone.

_____ Draw against a fine stone.

_____ Draw against a steel.

_____ Draw against a medium stone.

_____ Draw against a very fine stone.

ACTIVITY FOUR – SCRAMBLED, NOT FRIED

All of the words in this puzzle are the names of different kinds of cooking equipment, but the letters in each word have been scrambled. Unscramble each word and put the correct spelling in the blanks on the right.

Scrambled	Unscrambled
nifmuf itn	_ _ _ _ _ ◯ _ _ _
eesth nap	_ _ _ _ _ ◯ _ _
nori lletski	_ _ _ _ ◯ _ _ _ _ _ _
ctkopots	_ ◯ _ _ _ ◯ _ _
srebria	_ _ ◯ _ _ _ _
tohel pna	_ ◯ _ _ _ _ _ ◯
retsroa	_ _ ◯◯ _ _ _
bloude relbio	◯ _ _ _ _ _ _ _ _ _ _ _

Now, rearrange the circled letters to spell out three words you should now know alot about.

_ _ _ _ _   _ _ _ _   _ _ _ _ _

ACTIVITY FIVE — WHAT TO CHOOSE?

To cook each of the foods listed below you must use a different pot or pan. Put the letter of each food listed in Column 1 on the line in front of the pot or pan listed in Column 2 that you would choose to cook it in. Each pot or pan can only be used once.

| Column 1	Column 2
a. Panbroiled Steak	_____ Saucepot
b. Corn-on-the-Cob	_____ Hotel Pan
c. Soup	_____ Muffin Tin
d. Melted Chocolate	_____ Saucepan
e. Cupcakes	_____ Skillet
f. Meat Loaf	_____ Stockpot
g. Oven-fried Chicken	_____ Double Boiler
h. Braised Meat	_____ Sheet Pan
i. Gravy	_____ Braiser
j. Sautéd Onions	_____ Loaf Pan
k. Roasted Turkey	_____ Sauté Pan
l. Lasagna	_____ Roaster

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ACTIVITY SIX - QUICK CROSSWORD

See how much you know about the tools we just saw.
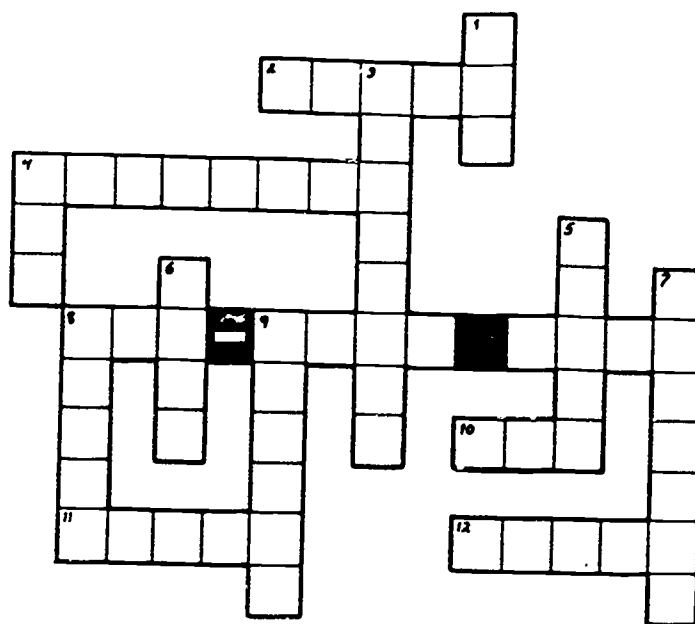
Clues

Across

2. A basting spoon can be used to mix, stir, serve and _____ .

4. Used to drain fruits and vegetables.

8. Used to hold meat as it is carved (two words).

10. Use a ladle to _____ liquid from the pot.

11. Another name for #3 Down.

12. To serve a portion of soup or gravy, use a _____ .

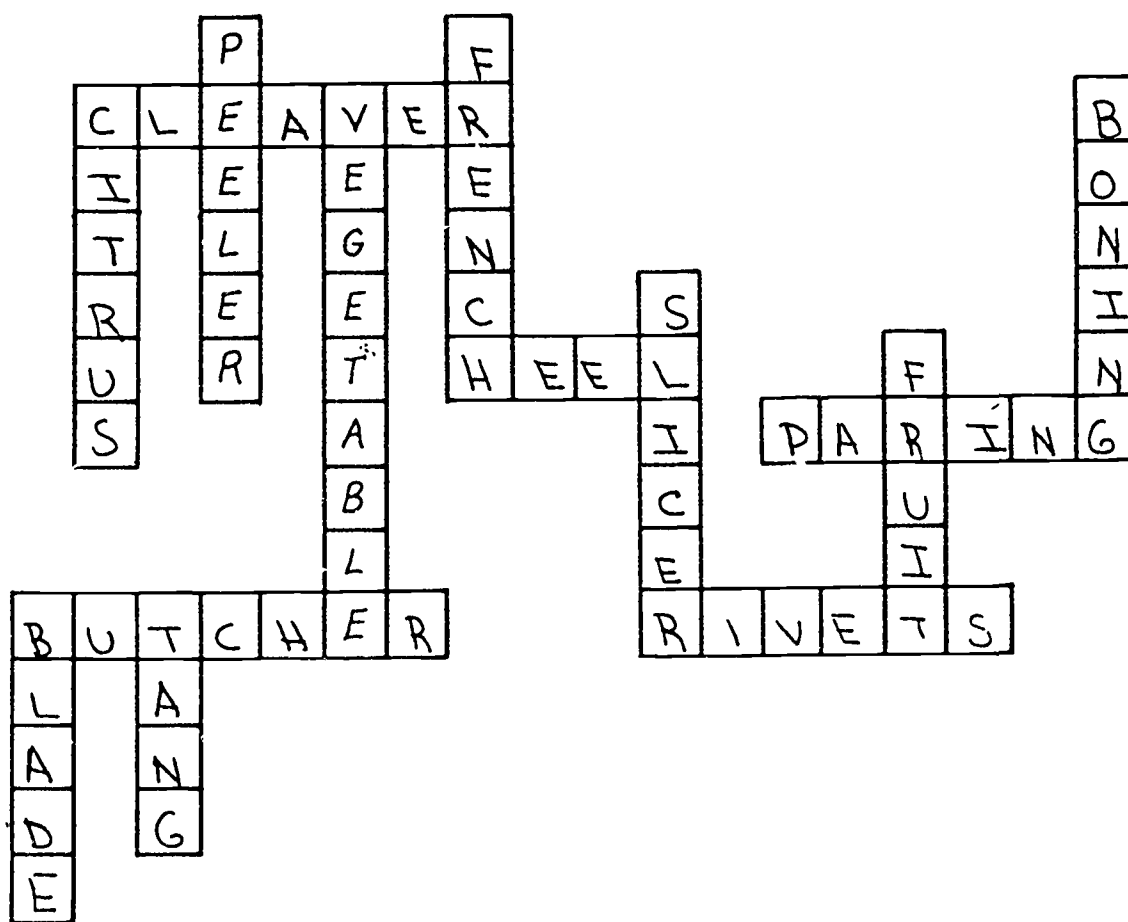### Down

1. Use an off _____ spatula on a grill.

3. A tool used to remove fine particles from liquids.

4. A China _____ is an extra strong strainer.

5. Used to serve controlled portions of foods, such as ice cream.

6. Another word for utensil.

7. A spoon used to remove fat from stocks and soups.

8. Good to use when lifting or serving spaghetti.

9. A pancake _____ ; same as #1 Down.

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ANSWER KEY - ACTIVITY SHEETS

Activity One - Numbered Parts

a. Heel
b. Rivet
c. ~~Blade~~ Tang
d. Blade
e. Tip
f. Handle

Activity Two - Locked Knives

Crossword answers: CLEAVER, PEELER, VEGETABLE, FRENCH, BONING, CITRUS, SHEEL/HEEL, SLICER, PARING, FRUIT, RIVETS, BUTCHER, BLADE, TANG

Activity Three - Keep It Sharp

6
1
3
5
2
4

Activity Four - Scrambled, Not Fried

muffin tin
sheet pan
iron skillet
stock pot
braiser
hotel pan
roaster
double boiler

pots and pans

Activity Five - What to Choose?

b - sauce pot
i - hotel pan
e - muffin tin
i - saucepan
a - skillet
c - stockpot

d - double boiler
g - sheet pan
h - braiser
f - loaf pan
j - saute pan
k - roaster

Activity Six - Quick Crossword

Across

2. Baste
4. Colander
8. Two-tine Fork
10. Dip
11. Sieve
12. Ladle

Down

1. Set
3. Strainer
4. Cap
5. Scoop
6. Tool
7. Skimmer
8. Tongs
9. Turner

Name _____

Date _____

Utensils In Food Service Test

Put the number of the picture on the line following the correct name on this page.

|		
Apple Corer _____	Flour Sifter _____	Pastry Brush _____
Basting Spoon _____	French Knife _____	Rolling Pin _____
Boning Knife _____	Fruit or Salad Knife _____	Skimmer _____
Butcher Knife _____	Ice Cream Scoop _____	Slicer _____
Can Opener _____	Ladle _____	Slotted Spoon _____
China Cap _____	Meat Slicer _____	Spatula _____
Citrus Knife _____	Melon Baller _____	Strainer _____
Cleaver _____	Mixer _____	Tongs _____
Colander _____	Mixing Bowl _____	Two-tine Fork _____
Cookie Cutter _____	Pancake Turner _____	Vegetable Peeler _____
Dough Scraper _____	Paring Knife _____	Whip _____
Egg Slicer _____	Pastry Blender _____	
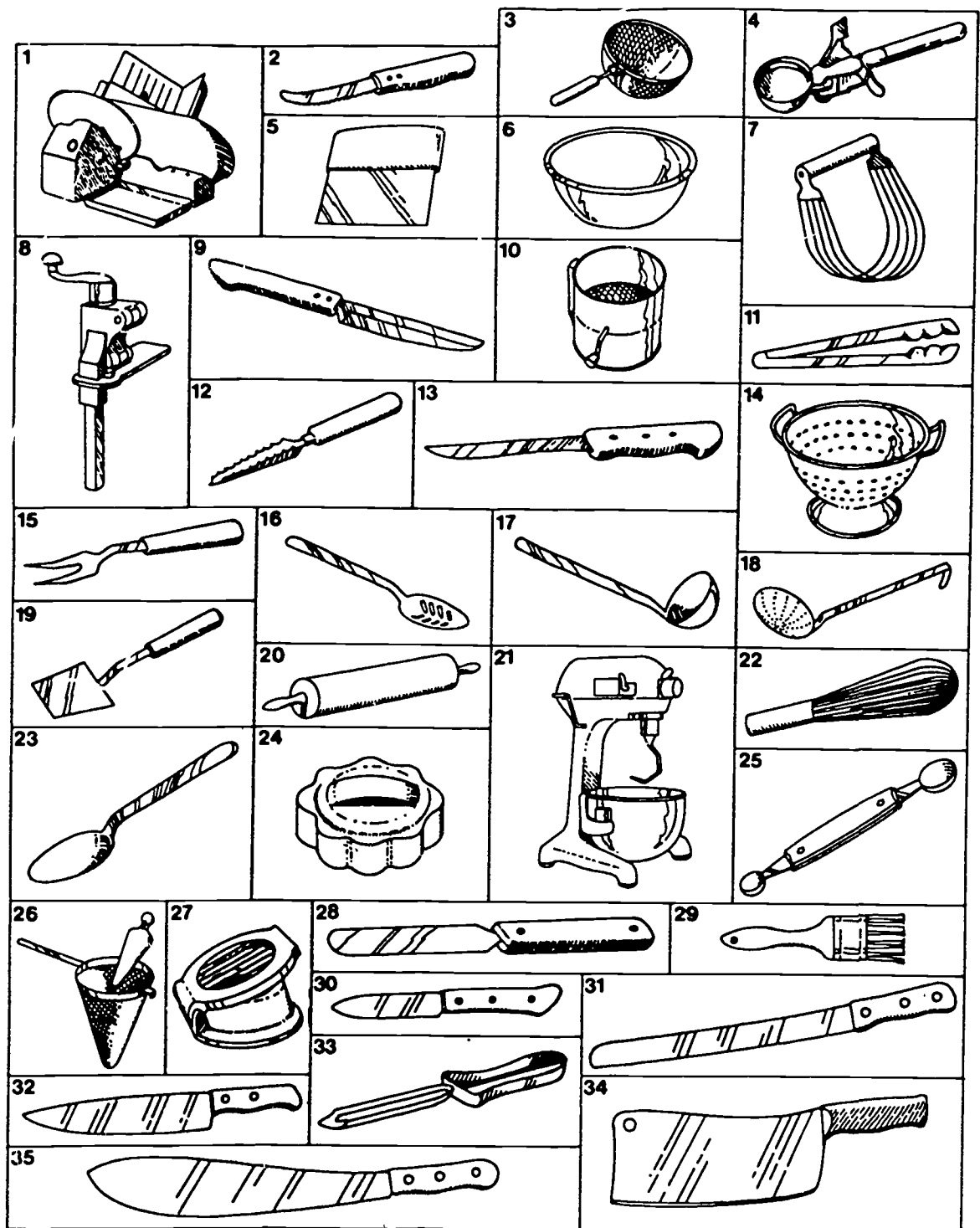
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ANSWER KEY - UTENSILS IN FOOD SERVICE TEST

Apple Corer __12__   Flour Sifter __10__   Pastry Brush __29__

Basting Spoon __23__   French Knife __32__   Rolling Pin __20__

Boning Knife __13__   Fruit or Salad Knife __9__   Skimmer __18__

Butcher Knife __35__   Ice Cream Scoop __4__   Slicer __31__

Can Opener __8__   Ladle __17__   Slotted Spoon __16__

China Cap __26__   Meat Slicer __1__   Spatula __28__

Citrus Knife __2__   Melon Baller __25__   Strainer __3__

Cleaver __34__   Mixer __21__   Tongs __11__

Colander __14__   Mixing Bowl __6__   Two-tine Fork __15__

Cookie Cutter __24__   Pancake Turner __19__   Vegetable Peeler __33__

Dough Scraper __5__   Paring Knife __30__   Whip __22__

Egg Slicer __27__   Pastry Blender __7__

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Correctly label the parts of the knife.

A. Blade   B. Handle   C. Rivet   D. Tip   E. Heel   F. Tang
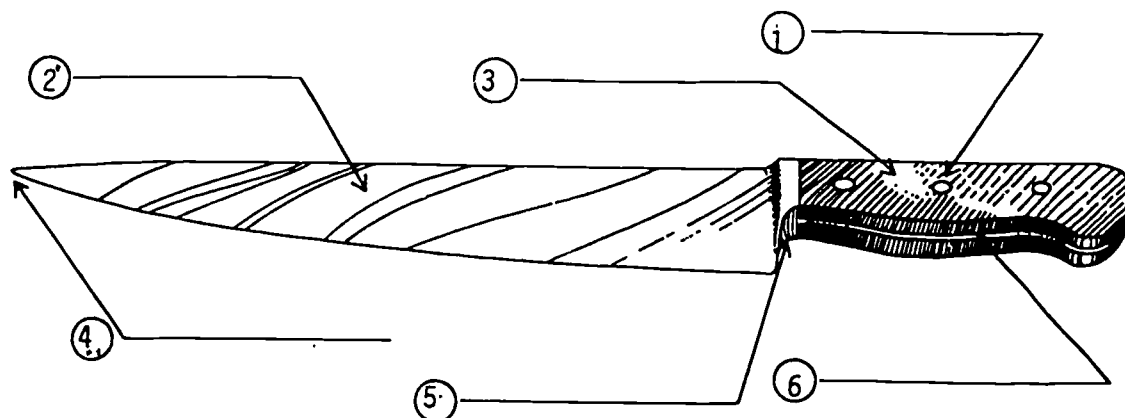
a. Part 1 in the picture is called _____

b. Part 2 in the picture is called _____

c. Part 3 in the picture is called _____

d. Part 4 in the picture is called _____

e. Part 5 in the picture is called _____

f. Part 6 in the picture is called _____

True-False: Mark <u>T</u>, on the line, if the statement is true and <u>F</u> if the statement is false.

_____ 1. French knives are used to cut meat and bread.

_____ 2. Meat thermometers measure the internal temperature and doneness of the meat as it cooks.

_____ 3. Scoops are a tool that can be used to portion foods before and after preparation.

_____ 4. There should be a cutting board for raw meat and another for cooked meat.

_____ 5. It isn't necessary to wash dirty utensils and tools until you need them.

_____ 6. Portion control means "serving the correct and specified size of a prepared item".

_____ 7. Mixing does not require specialized tools because all mixing is basically the same.

Multiple Choice: Put the letter on the line which best fits the answer to the question.

_____ 1. Which knife would you choose to mince an onion?

A. Cleaver   C. Slicer
B. French knife   D. Paring knife

_____ 2. Which word describes a sawlike edge on a knife?

A. Minced   C. Divided
B. Serrated   D. Separated

_____ 3. What task would a cleaver be used for?

A. Sharpening a knife   C. Splitting bones
B. Paring vegetables   D. Slicing bread

_____ 4. What is the best place to store knives?

A. In a kitchen drawer.
B. Point down in a metal can.
C. In a slotted wooden rack.
D. In a plastic container.

_____ 5. What task would a wire whip be used for?

A. Stirring spaghetti   C. Mixing dough
B. Picking up hot food   D. Blending milk and eggs

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_____ 6. What pan is often used in place of a bain-marie?

    A. Bake pan   C. Double boiler
    B. Sauce pan   D. Saute pan

_____ 7. Which piece of equipment would be best for measuring the amount of dough to be dropped on a baking pan?

    A. Scoop   C. Spoon
    B. Ladle   D. Tablespoon

Short Answer

What safety rules should you observe when working with knives? List 4 rules.

    a.

    b.

    c.

    d.

Matching: Match the words on the right with the correct definition on the left.

_____ 1. to combine two ingredients by gently turning the mixture over and over very slowly with a whisk, spoon, or rubber scraper	A.	Blend
	B.	Chop
_____ 2. to tear or cut into thin pieces	C.	Fold
_____ 3. to combine 2 or more ingredients thoroughly usually with a spoon or electric mixer	D.	Julliene
	E.	Shred
_____ 4. to beat rapidly with a whisk, rotary beater, or electric mixer	F.	Whip
_____ 5. to cut into fine pieces with a sharp knife or chopper		
_____ 6. to cut into thin, lengthwise strips		

Parts of the Knife

1. Rivet C
2. Blade A
3. Handle B
4. Tip D
5. Heel E
6. Tang F

True-False   Matching

1. F   1. C
2. T   2. E
3. T   3. A
4. T   4. F
5. F   5. B
6. T   6. D
7. F

Multiple Choice

1. B
2. B
3. C
4. C
5. D
6. C
7. A

Short Answer

Use the right knife for the job.
Work on the proper cutting surface.
Direct the blade away from yourself as you cut.
Carry the knife with point down.
Don't try to catch a falling knife.
Don't use a bent or damaged knife.
Keep knives sharp and clean.
Keep track of knives at all times.
Don't gesture with a knife or turn suddenly.

this is the **LAST** page...

NOT

THE END

This is the most important page,

because this marks the beginning

of your

Extended Campus experience.